

(26,868)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1918.

No. 782.

GEORGE C. BEIDLER, APPELLANT,

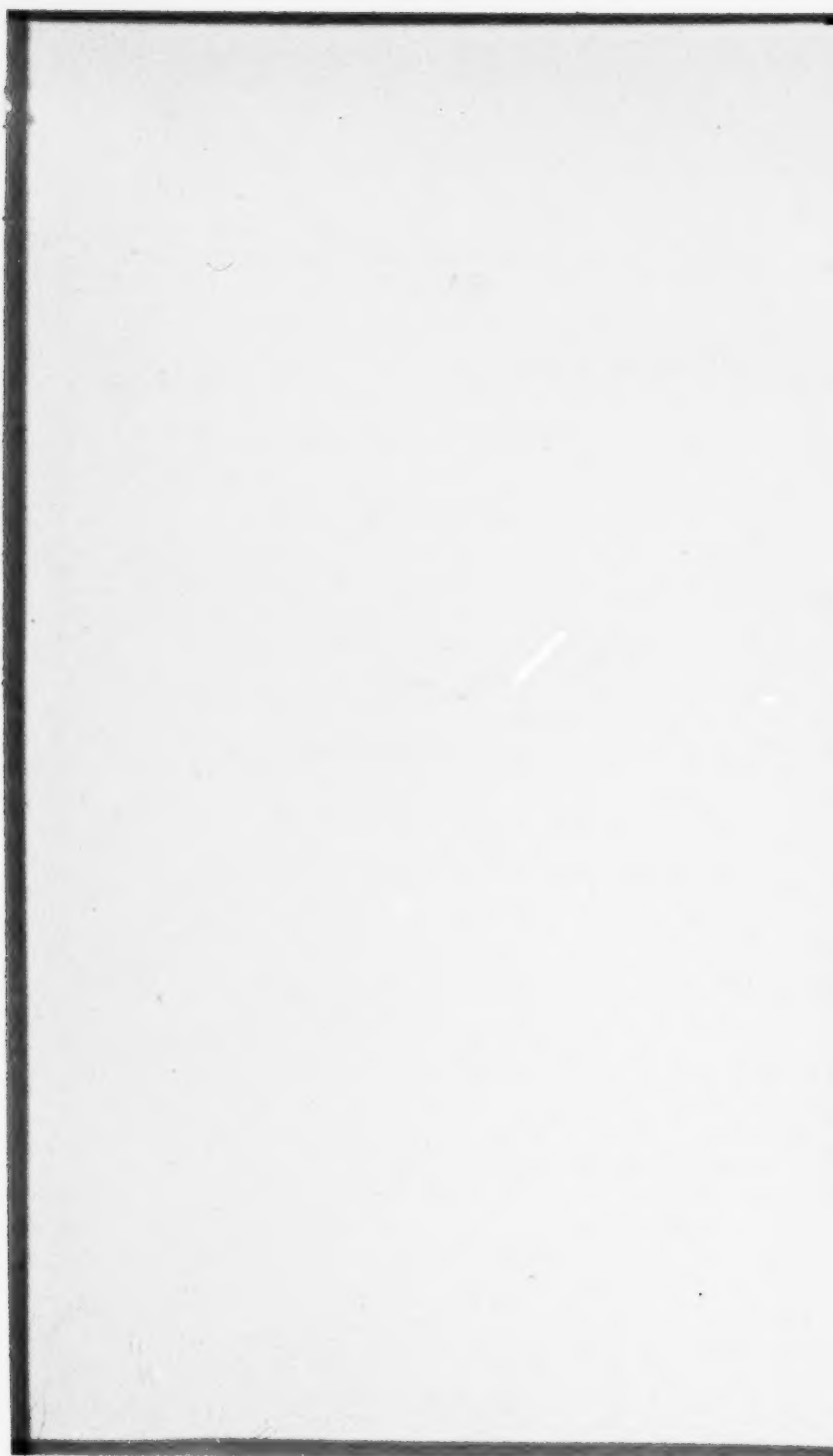
vs.

THE UNITED STATES.

APPEAL FROM THE COURT OF CLAIMS.

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1 In the Court of Claims of the United States.

No. 32767.

GEORGE C. BEIDLER

against

UNITED STATES.

I. Petition.

Filed February 14, 1914.

To the Honorable the Judges of the Court of Claims of the United States:

Now comes George C. Beidler, formerly a resident of the city of Oklahoma, in the county of Oklahoma, and State of Oklahoma, but now a resident of Rochester, in the county of Monroe, and State of New York, and citizen of the State of New York and of the United States, and files this petition against the United States; and thereupon, your petitioner complains and says:

First. That your petitioner on or before March 23, 1907, was the first, original, true and sole inventor of new and useful Improvements in Photographing and Developing Apparatus, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof,

2 or more than two years prior to his application for United States Letters Patent hereinafter mentioned, and not in public use or on sale in this country for more than two years prior to his said application, and not abandoned, and not first patented or caused to be patented by petitioner or his legal representatives or assigns in any foreign country; that so being as aforesaid the first, original, true and sole inventor of said Photographing and Developing Apparatus, your petitioner did, upon his due application for United States Letters Patent therefor, filed March 23, 1907, in the United States Patent Office, obtain Letters Patent for said invention in due form of law, under the seal of the Patent Office in the United States, signed by the Commissioner of Patents bearing date of March 25, 1913, and numbered 1,057,397, and whereby there was granted and secured to your petitioner, his heirs and assigns, for the term of seventeen years from the date of said Letters Patent, the full, sole and exclusive right and liberty of making, using and selling said invention, as set forth in said Letters Patent, throughout the United States and the Territories thereof, to the full end of the term of said Letters Patent, which, or a duly certified copy of which, is now ready, in Court, to be produced and shown unto your Honors.

Second. Your petitioner avers that he is, and at all times past,

has been, the sole and exclusive owner of said invention, and now is, and at all times has been, the sole and exclusive owner of said Letters Patent numbered 1,057,397; that he is the sole and exclusive owner of the claim herein stated; and that no action on the claim herein stated has been had in Congress, or by any of the departments; that your petitioner has, at all times, borne true allegiance to the government of the United States and has not, in any way, voluntarily aided, abetted, or given encouragement to rebellion against the government.

3 Third. That your petitioner is advised by his counsel and believes and therefore avers, that said Letters Patent numbered 1,057,397 is valid and effectual in law to secure to your petitioner the exclusive rights and privileges thereby granted; that so far as your petitioner has been informed and believes, the public generally have acquiesced in your petitioner's rights, under said Letters Patent; that your petitioner is entitled to exclusive use and enjoyment of the said invention, and Letters Patent; that said invention is being manufactured by the Rectigraph Company, a corporation of the State of Oklahoma, under license from your petitioner; and that but for the infringement herein complained of your petitioner would have been, and would now be, in the undisturbed possession, use and enjoyment of the said invention and of the exclusive rights and privileges and in receipt of the profits of the same.

Fourth. That the invention covered and claimed in the said Letters Patent was not discovered or invented by the said George C. Beidler while an employee of the government of the United States during the time of his employment or services by or for the government of the United States, nor is the said George C. Beidler now in the employment or service of the government of the United States.

Fifth. That your petitioner is informed and believes, and therefore avers, that the United States, through its officers and agents, well knowing the premises and the exclusive rights granted as aforesaid, and especially through the officers or officials of its Department of the Interior, its Department of Agriculture, its Department of Justice, its Library of Congress, its Department of War, its Department of the Navy, its Department of Commerce, and its other departments, the names of which your petitioner is not aware or

4 informed but information of which is in possession of the government, which is requested to produce the same, and otherwise, since the 25th day of June, 1910, and before the filing of this petition, without license of your petitioner, or without lawful right, made and constructed, or caused to be made and constructed, and used, or caused to be used, apparatus containing and embodying in use the invention covered and claimed by said Letters Patent number 1,057,397, in violation and infringement of said Letters Patent and of the rights of your petitioner thereunder; that such unlawful and unauthorized use of your petitioner's said patented invention, has resulted in great injury, damage and loss to your petitioner, to wit, as your petitioner is informed and believes, and avers the aggregate sum of One hundred thousand dollars (\$100,000.00) damages, which sum is still due to your petitioner,

no part thereof having been paid, and which sum or such other reasonable compensation for the use by the United States of your petitioner's said patented invention as this Honorable Court may find to be due your petitioner, your petitioner avers he is justly entitled to recover, after allowing all just credits and offsets.

Sixth. And your petitioner further shows unto your Honors that upon learning of the infringement by the United States, well believing that it would cease the same, it notified and warned it to desist therefrom, but that the said United States neglected and refused so to do and continued, and still continues, after such notice, to make, use and vend the apparatus patented and secured to your petitioner as aforesaid.

Seventh. Your petitioner's said claim for compensation for use of said patented invention is not based on the use by the United States of any article, apparatus or method owned, leased, or used by or in the possession of the United States prior to June 25, 1910.

Wherefore your petitioner prays judgment in his favor against the United States for the sum of One hundred thousand dollars (\$100,000.00) and for such other and further relief as to the Court may seem just.

GEORGE C. BEIDLER,
Petitioner.

FRANK S. APPLEMAN,
Attorney.

STATE OF NEW YORK,
County of Monroe, City of Rochester, ss:

George C. Beidler, being duly sworn, according to law, says: that he is the petitioner named in the foregoing petition by him subscribed; that he has read said petition and knows the contents thereof; that the said petition is true of his own knowledge, except as to matters therein stated to be on information and belief, and as to such matters he verily believes it to be true.

GEORGE C. BEIDLER.

Sworn to and subscribed before me this 4th day of February, 1914.

[SEAL.]

CHARLES W. PYATT,
Notary Public.

Commission expires March 30, 1914.

II. *General Traverse.*

Court of Claims.

No. 32767.

GEORGE C. BEIDLER

VS.

THE UNITED STATES.

No demurrer, plea, answer, counterclaim, set-off, claim of damages, demand, or defense in the premises, having been entered on the part of the defendants, a general traverse is entered as provided by Rule 34.

III. *Argument and Submission of Case.*

On January 11, 1918, this case was argued and and submitted on merits by Messrs. Frank S. Applemand and Ernest W. Bradford, for the claimant, and Mr. Henry C. Workman, for the defendants.

7 IV. *Findings of Fact and Conclusion of Law. Entered April 29, 1918.*

This case having been heard by the Court of Claims, the court, upon the evidence, makes the following

Findings of Fact.

I.

On March 23, 1907, the claimant, George C. Beidler, filed an application for United States letters patent for an improvement in photographing and developing apparatus; and on March 25, 1913, there were granted to the claimant upon said application Letters Patent No. 1,057,397, of which the following is a copy:

United States Patent Office.

George C. Beidler, of Oklahoma, Okla. Photographing and Developing Apparatus. 1,057,397. Specification of Letters Patent. Patented Mar. 25, 1913. Application Filed March 23, 1907. Serial No. 364,015.

To all whom it may concern:

Be it known that I, George C. Beidler, citizen of the United States of America, residing at Oklahoma city, in the county of Okla-

G. C. BEIDLER.
 PHOTOGRAPHING AND DEVELOPING APPARATUS.
 APPLICATION FILED MAR. 21, 1907.

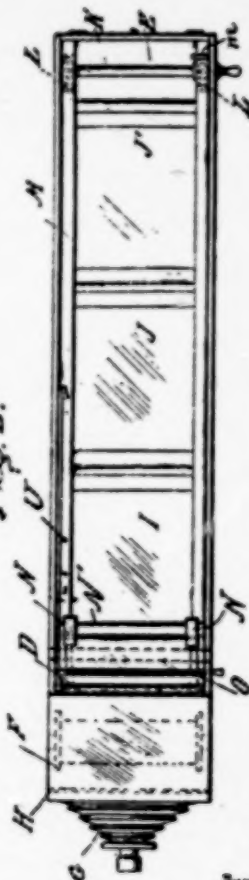
1,057,397.

Patented Mar. 25, 1913.

Fig. 1.



Fig. 2.



Inventor

George C. Beidler

Frank. Appelman,

Attorney

Witness
 Samuel H. ...
 Oliver ...

110782-7 } p. 8.
 Beidler
 U.S. Patent

homa and State of Oklahoma, have invented certain new and useful Improvements in Photographing and Developing Apparatus, of which the following is a specification.

This invention relates to printing and developing apparatus and refers more particularly to an apparatus designed primarily for reproducing writings, drawings, pictures, or the like, novel means being also provided to convey the sensitized film through a series of receptacles containing suitable developing and fixing fluids or through suitable baths according to the requirements.

A preferred form of construction of my apparatus will be herein described, but it is to be understood that this particular form is shown only for the purpose of illustrating one embodiment of the invention.

It is an object of this invention to provide an apparatus which will be simple in construction, efficient in practice and economical to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views in which—

(Here follows diagram marked p. 8.)

Figure 1, is a longitudinal vertical sectional view through the casing with parts in elevation; and Fig. 2, is a plan view of the apparatus with the top of the casing removed.

In these drawings A, denotes a suitable casing supported in any manner desired containing a compartment B, adapted to contain sensitized paper, preferably in roll form. The roll W is suitably mounted to rotate and the paper drawn from the roll is projected through the top of the compartment between the rollers b, and then directed to travel over the top of the said compartment between the rollers D, into the compartment E. There is an exposure chamber F, above the compartments and a suitable camera G, is provided for taking the picture, there being an angularly disposed mirror H, in the exposure chamber for reflecting the image onto the sensitized paper or film heretofore referred to.

The compartment E, is provided with a series of pans or tanks I, J, and J', and these tanks may be multiplied to suit the requirements of practice to contain the several liquids required in fixing and developing the exposed films.

In order to draw the films through the several compartments, I provide a mechanism consisting of a shaft K, having toothed wheels L, which mesh with a rack M, the said rack being suitably guided

10 in the compartment E, and being alternately reciprocated through the rotation of the shaft K, in opposite directions.

When the shaft is turned to the right, the said rack will be projected from the compartment until the inner end thereof is nearly above the shaft K. When the shaft is rotated in the opposite direction, the said rack will, of course, be retracted and thrust into the compartment. It is the purpose of this invention that the said rack shall carry clips N, which are designed to clamp on the edges of the film Y and as the said rack is moved outwardly, the film is carried through the several tanks as indicated. The clips are automatically released and set through the contact with trips within the casing in the path of travel of said clips. The trips just referred to are preferably near the ends of the casing and consist of pins *m* and *n*, projecting preferably transversely of the casing above one side of the rack and as there is a clip N, on each side of the rack, the said clips are moved in unison by reason of the connecting rod N'. From an inspection of the drawing it will be observed that the upper end of the lever N' for operating the clip, comes in contact with the pin *n* when the rack has reached the limit of its forward movement and hence said lever is thrown into engagement with the end of the clip to close the jaws of said clip and the parts will remain in this relation until the rack has traveled to nearly the limit of its outward movement when the upper end of the lever will strike the pin *m*, thus moving the said lever out of engagement with the end of the clip and releasing the clip to permit the discharge of the paper into the receptacle J'. After the paper is cut by the knife O, it is desirable to move the next succeeding film portion a short distance beyond the knife in order that it may be in the path of travel of the clips. To effect this initial movement of the film, I provide a lever R, which is pivoted in the casing and the upper end of the lever carries a pawl S, which projects into engagement with a ratchet wheel T, on the roller D. A pin U, on the rack contacts with the lower end of the lever R, as the rack is reciprocated and the said lever is thereby oscillated to move the pawl and cause the rotation of the said roller D.

In order to sever the prints into appropriate lengths, I provide a cutter O, which may be of any construction for severing the films, the cutter illustrated in the drawings comprising two contacting blades, one of which may be pivoted with relation to the other and it may be provided with an operating handle.

Any suitable means may be provided for drawing the film through the exposing chamber, but I have shown the rollers D, which if suitably rotated would draw the film through the exposing chamber and deliver it to the carriers.

I claim—

1. In a photographing and developing apparatus, a chamber, suitable means for drawing film and delivering it to the chamber, tanks in said chamber, a rack and gear operating mechanism for carrying the film delivered to the chamber, through the tanks, means on the

racks for engaging the film, and means acting on the film drawing means for imparting an initial movement to the film.

2. In a photographing and developing apparatus, a compartment adapted to contain a supply of film, means for drawing the film therefrom, a chamber to which film is delivered by the means for drawing film, a series of tanks, a rack traveling over the tanks,

11 a gear for moving the rack, means on the rack for engaging the film delivered to the chamber to carry said film through the tanks, and means acting on the film drawing means for imparting an initial movement to the film to project it into the path of travel of the film engaging means on the rack.

3. In a photographing and developing apparatus, a series of tanks, a frame movable over the tanks, means on the frame for engaging film, means for operating the film engaging means, film drawing means, a source of film supply from which the film is drawn by the said drawing means, and means operated by the frame to cause the film drawing means to impart initial movement to the film to project it into the path of travel of the film engaging means.

4. In a photographing and developing apparatus, a chamber, means for projecting film into the chamber, a member having reciprocating movement in the chamber, means for operating said member, means on the member for engaging and carrying said film, and a liquid container in the chamber through which the film is drawn by said member.

5. In a photographing and developing apparatus, a chamber, means for projecting film into one end of the chamber, means in the chamber adapted to engage the film, means for reciprocating the film engaging means lengthwise of the chamber and means in the path of the film engaging means for tripping the same.

6. In a photographing and developing apparatus means for containing a supply of film, a chamber, means for delivering film to the chamber from the means for containing the supply of film, receptacles in said chamber for containing fluids, means for cutting the film delivered to the chamber, reciprocating means mounted to move across the receptacle, and means on said reciprocating means for engaging the film delivered to the chamber for carrying said film in the liquid contained by the receptacle.

7. In a machine relating to photography, means for containing a supply of film, a chamber, means for delivering film from the first mentioned means to the said chamber, receptacles in the chamber for containing fluid adapted to act on the coated surface of the film, means for cutting the film delivered to the chamber, and a member mounted to reciprocate in the said chamber for effecting the transfer of the film from one receptacle to another.

8. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light and having means for subjecting a portion of film at a time to the action of such rays, film holding and suspending means supported wholly exterior to the liquid and in position to subject the film carried thereby to the action of the liquid, and means for pro-

ducing relative movement of the liquid and said film holding means while the portion of film suspended by the latter is in said liquid.

9. In a machine relating to photography, means for containing a supply of film, a chamber to which film is delivered from the means for containing the supply thereof, means for transferring the film from the containing means to the chamber, receptacles in the chamber to contain fluids, a member mounted to reciprocate in the chamber and operative to transfer film from one receptacle to another, and a rack and pinion for moving the reciprocating member.

12 10. In a machine relating to photography, means for containing a supply of film, a chamber to which film is delivered from the means for containing the supply thereof, means for transferring the film from the containing means to the chamber, receptacles in the chamber to contain fluids, a member horizontally mounted to reciprocate in the chamber, operative to transfer film from one receptacle to another, and a rack and pinion for moving the reciprocating member.

11. In a photographing and developing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light and having means for subjecting a portion of film to the action of such rays, a receptacle containing liquid, film holding and suspending means, a support for the last mentioned means always maintaining the film holding and suspending means exterior to the liquid in the receptacle and in position to subject the film to the action of the liquid in the receptacle, and means for producing relative movement of the film suspended from said holder and said liquid, whereby the suspended film is moved through the liquid in said receptacle.

12. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, means for subjecting a portion of the film to the action of such rays, a receptacle containing liquid, film holding and suspending means, a support for the last mentioned means always maintaining the film holding and suspending means exterior of the liquid in the receptacle, said film holding and suspending means including a to and fro moving member for producing relative movement of the film holder and suspending means and said liquid, whereby the suspended film is moved through the liquid in said receptacle.

13. In a photographing and developing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light and having means for subjecting portions of the film to the action of such rays, a receptacle for containing liquid, film holding and suspending means, a support for the last mentioned means always maintaining the film holding and suspending means exterior to the fluid in the receptacle, and means for reciprocating said film holding and suspending means across the receptacle and in position to subject the film to the action of the fluid in the receptacle.

14. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from

actinic rays of light and having means for subjecting a portion of film to the action of such rays, a liquid holder, film holding and suspending means including a to and fro moving member, a support for the latter above liquid in the holder, and means for producing relative movement of said film suspending means and said liquid holder.

15. In a photographing and developing apparatus, the combination of means for holding a supply of film having means for exposing a portion of film to light, receptacles within the casing for containing fluids, means for delivering the film thereto, means for engaging and supporting the delivered film, means for moving the film engaging and supporting means lengthwise of the chamber, and means for cutting the film.

13 16. In a photographic and developing apparatus, the combination of means for holding a supply of film and having means for exposing a portion of film to light, receptacles for containing fluid, means for delivering film thereto, means for engaging and supporting the delivered film, means for moving the film engaging and supporting means lengthwise of the chamber, and means for cutting the film.

17. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light and having means for subjecting a portion of film at a time to the action of such rays, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film moving means situated to receive the film coming from said film feeding means so as to carry said film and subject the film to the action of liquid in the liquid holder.

18. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light and having means for subjecting a portion of film at a time to the action of such rays, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film clamp situated to receive the film coming from said film feeding means and operative to subject the film to the liquid in the liquid holder.

19. In a photographing and developing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light and having means for subjecting a portion of film at a time to the action of such rays, a liquid holder, film feeding means situated between the said holder and the said source of supply of film, a reciprocating film clamp, means for operating the clamp to engage the film, means for operating the clamp to release the film, and means for moving the film clamp with relation to the liquid holder, whereby the film carried thereby is subjected to the action of fluid in the liquid holder.

20. A photographing and developing apparatus having a casing provided with an opening for exposing film to light, containers for liquids within a portion of the casing, means for feeding film after exposure into that portion of the casing having the containers for

liquids, means between the feeding means and containers for gripping film, means for operating the gripping means to cause it to engage a film, means for causing the gripping means to move and draw film from one container of liquid to another, and means to cause the gripping means to release the film.

21. A photographing and developing machine having a casing provided with an opening for exposing sensitized paper, means within a portion of the casing for containing developing liquid, means for containing another liquid, means for feeding the sensitized papers after exposure into that portion of the casing having the containing means and above said containing means, means to grip the papers between the feeding means and the said containing means, means to shear the paper between said feeding means and the gripper to permit the paper to fall into the said containing means, means for causing the gripper to move and draw the paper from one containing means and dispose it over the liquid in another containing means and

for returning said gripping means to its initial position, 14 means to cause the gripper to release the paper and to permit it to fall flatwise into the liquid, means for returning the gripping mechanism to its initial position, and means for operating the said gripping mechanism to cause it to engage sensitized paper after it is returned to its initial position.

22. A photographing and developing apparatus comprising a casing provided with an opening for exposing sensitized paper, means within a portion of the casing for containing solutions, means for feeding the sensitized paper after exposure into that portion of the casing having the solution containers, means to grip the paper between the feeding means and said solution containers, means to shear the paper between said feeding means and the gripper, means for causing the gripper to move and draw the paper from one container to the other and dispose it over the solution to which it is last drawn, means to cause the gripper to release the paper and permit it to fall flatwise into the solution in the container to which it is last drawn, and means for operating the gripper to engage sensitized paper on its return to its initial position near the means for feeding the sensitized paper.

23. In a photographing and developing apparatus having a casing provided with an opening for exposing film, means in a portion of the casing for containing a solution, means for feeding film after exposure into that portion of the casing having the said means for containing a solution, means for stretching the film over the means for containing the solution, and means for severing the film to permit it to fall into the solution.

24. In a photographing and developing apparatus having a casing provided with an opening for exposing sensitized paper, means within the casing to contain developing solution, means for containing fixing solution, means for feeding the sensitized paper after exposure into that portion of the casing having the means for containing the solution, means associated with the casing for cutting the paper, means for drawing film from one containing means to the

other and for stretching said film over a container while said paper is being cut, to permit said paper to fall into a containing means.

25. A photographing and developing apparatus having a casing provided with an opening for exposing film to light, a solution container in a portion of the casing, means for delivering film to that portion of the casing having the container, means in the casing to grip the film delivered to the casing, and means for operating the gripping means to cause it to move with relation to the container and to carry the film in the solution.

26. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, a container for liquid, film holding and suspending means supported wholly exterior to the liquid, and means for producing relative movement of the liquid and film holding means while the film suspended by the latter is in said liquid.

27. In a photographing apparatus, an inclosing casing adapted to hold a supply of film and having means for exposing portions of said film to light, a receptacle containing liquid, film holding and suspending means, a support for the last mentioned means always maintaining the film holding and supporting means exterior to the liquid in the receptacle, and means for producing relative movement of the film suspended from said holder and said liquid, whereby the suspended film is moved through the liquid in said receptacle.

28. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a receptacle containing liquid, means for moving film from the means for holding the supply thereof, means exterior to the liquid for supporting the film after its delivery from the means for holding a supply of film, and means on which the means for supporting the film is movable, in such relation to the receptacle containing liquid as to move the film through the liquid.

29. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a receptacle containing liquid, film holding and suspending means, means for delivering film from the means for holding a supply of film to the film holding and suspending means, a support for the last mentioned means always maintaining the film holding and suspending means exterior to the fluid in the receptacle, and means for reciprocating said film holding and suspending means across said receptacle whereby film carried by the film holding and suspending means is subjected to the action of fluid in the receptacle.

30. In a photographic apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a liquid holder, film holding and suspending means, means for transferring film from the means for holding a supply of film to the film holding and suspending means, a support for the film holding and suspending means above the liquid in the holder, and means for producing relative movement of said film suspended from said holding means and said liquid comprising a to and fro

moving member whereby the film is subjected to the action of the liquid.

31. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, receptacles to which the film is delivered, means for delivering the film thereto, means mounted to reciprocate with relation to the receptacles and operative to transfer film from one receptacle to another, and means for cutting the film.

32. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, receptacles to which the film is delivered, means for engaging the film, means for moving the film engaging means lengthwise of the chamber, and means for cutting the film.

33. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film moving means situated to receive the film coming from said film feeding means to carry said film and subject the film to the action of a liquid in the liquid holder.

34. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film clamp situated to receive the film coming from said film feeding means.

16 35. In photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, a reciprocating film clamp, means for operating the clamp to engage the film, and means for operating the clamp to release the film.

36. In a photographing apparatus, the combination of means for holding a supply of film, a receptacle containing liquid, film holding and suspending means, means located adjacent the receptacle containing liquid for supporting the last mentioned means and maintaining the film holding and supporting means exterior to the liquid in the receptacle, the said film holding and suspending means comprising a to and fro movement member adapted to travel on the means for supporting the same for producing relative movement of the film suspended from said holder and said liquid whereby the suspended film is moved through the liquid in said receptacle.

37. In a photographing apparatus, the combination of means for holding a supply of film, a receptacle containing liquid, film holding and suspending means, means for delivering film from the means for holding a supply of film to the film holding and suspending means, a support adjacent to the receptacle containing liquid, said film holding and suspending means being supported thereby for maintaining the film holding and suspending means exterior to the fluid in the receptacle, and means for reciprocating said film holding and suspending means on the support across said receptacle.

38. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a liquid holder, film holding and suspending means, a support for the latter above the liquid holder, means for delivering film from the means for containing a supply thereof to the film holding and suspending means, and means for producing relative movement of said film suspending means and the liquid holder, for carrying the film through the fluid in the holder.

39. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, a reciprocating film moving means, means for supporting the reciprocating film moving means, situated in proximity to the liquid holder and in position to subject the film to the action of the liquid, said film supporting means adapted to travel on the said support across the liquid holder.

40. In a photographing and developing apparatus, an inclosing casing adapted to contain a supply of film and having means for exposing portions of said film to actinic light, receptacles within the casing for containing developing fluids, a reciprocating developing means operative to develop said exposed film, means for delivering the film from the exposing means to the reciprocating developing means, and means for severing the film.

41. In a photographing and developing apparatus, an inclosing casing adapted to contain a supply of film and having means for exposing portions of said film to actinic light, receptacles within the casing for containing developing fluids, reciprocating means operative to subject said exposed portions of film to the action of the fluids within said receptacles, means for delivering the film from the exposing means to the reciprocating means, and means for severing the film.

17 In testimony whereof I affix my signature in the presence of two witnesses this 15th day of March, 1907.

Witnesses:

GEORGE C. BEIDLER.

LATTES E. BARKLEY.
WILFRED E. LAWSON.

II.

The claimant's petition, specification, and claims in his said application for patent, as originally filed, were as follows:

Petition.

To the Commissioner of Patents:

Your petitioner, George C. Beidler, citizen of the United States of America, residing at Oklahoma City, in the county of Oklahoma, and State of Oklahoma, whose post-office address is Oklahoma City, Okla., prays that letters patent may be granted to him for the im-

provement in printing and developing apparatus as set forth in the annexed specification.

And he hereby appoints Frank S. Appleman, Washington, D. C., as his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, to sign the drawings, and to transact all business in the Patent Office connected therewith.

Signed at Washington, D. C., this 15th day of March, 1907.

GEORGE C. BEIDLER.

Specification.

To all whom it may concern:

Be it known that I, George C. Beidler, citizen of the United States of America, residing at Oklahoma City, in the county of Oklahoma and State of Oklahoma, have invented certain new and useful improvements in printing and developing apparatus of which the following is a specification.

This invention relates to printing and developing apparatus referring more particularly to an apparatus designed primarily for reproducing writings, drawings, pictures or the like, novel means being also provided to convey the sensitized film through a series of receptacles containing suitable developing and fixing fluids or through suitable baths according to the requirements.

It is an object of this invention to provide an apparatus which will be simple in construction, efficient in practice, and economical to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which

18 Figure 1, is a longitudinal vertical sectional view through the casing with parts in elevation.

Fig. 2 is a detail view of clips and means for operating them.

In these drawings, A denotes a suitable casing supported in any manner desired containing a compartment B, adapted to contain sensitized paper, preferably in roll form. The roll is suitably mounted to rotate and the paper drawn from the roll is projected through the top of the compartment between the rollers *b*, and then directed to travel over the top of the said compartment between the rollers D, into the compartment E.

There is an exposure chamber F, above the compartments and a suitable camera G, is provided for taking the picture, there being an angularly disposed mirror H, in the exposure chamber for reflecting the image on the sensitized paper or film heretofore referred to.

The compartment E, is provided with a series of pans or tanks I, J, and these tanks may be multiplied to suit the requirements of

practice to contain the several liquids required in fixing and developing the exposed films.

If desired a third compartment may be provided with water for washing the film, but as that is an immaterial detail, further reference to these elements will not be made.

In order to draw the film through the several compartments, I provide a mechanism consisting of a shaft K, having toothed wheels L, which mesh with a rack M, the said rack being suitably guided in the compartment E, and being alternately reciprocated through the rotation of the shaft K, in opposite directions. When the shaft is turned to the right, the said rack will be projected from the compartments until the inner end thereof is nearly in line with said shaft K. When the shaft is rotated in the opposite direction, the said rack will, of course, be retracted and thrust into the compartment. It is the purpose of this invention that the said rack shall carry clips N, which are designed to clamp on the edges of the film and as the said rack is moved outwardly, the film is carried through the several tanks as indicated.

In order to sever the prints into appropriate lengths, I provide a cutter O, which is here shown as manually operated, although the means for operating the cutters may be variously modified.

Any suitable means may be provided for drawing the film through the exposure chamber, but I have shown the roller D, provided with a crank handle so that as the said roller is turned, the film will be drawn through the chamber and projected under the knife where it can be engaged by the clips carried by the rack.

What I claim is:

1. In a photographic and developing apparatus, a suitable exposure chamber with means for exposing the film to light, suitable means for drawing the film through the exposure chamber, means for severing the film, a series of tanks through which the film is to be drawn, and a suitable rack and gear operating mechanism adapted to carry the film through the tanks.

2. In a photographic and developing apparatus, a suitable casing, a compartment adapted to contain a supply of film, means for drawing the film therefrom, an exposure chamber through which the film is drawn, a series of tanks, a rack and gear operating with relation to the tanks, and means on the rack for engaging the film to

19 carry the film through the tanks.

3. In a photographic and developing apparatus, a suitable casing, a compartment adapted to contain a supply of film, means for drawing the film therefrom, an exposure chamber through which the film is drawn, a series of tanks, a rack and gear operating with relation to the tanks, and means on the rack for engaging the film to carry the said film step by step through the tanks.

In testimony whereof I affix my signature in the presence of two witnesses, this 15th day of March, 1907.

GEORGE C. BEIDLER,

Inventor.

After some amendment of the drawings and multitudinous amendment of the specification and claims by the applicant, in response

to numerous and repeated objections and rejections by the Patent Office, throughout the six years the application was pending in said office, the drawing and specification of the application were modified and changed to the form in which they appear in the patent, and the three original claims of the application changed and increased to the 41 claims of the patent as issued.

The claims of the patent which are claimed in this suit to have been infringed by the United States are claims 17, 18, 33, 34, and 40.

III.

Of the proceedings in the Patent Office shown by the "File wrapper and contents," and comprising 76 printed pages of the record, only the following are considered material to the determination of the questions of law involved in this case.

By office action of May 21, 1907, the three original claims of the application were rejected as being for mere aggregations, the rejection being as follows:

"The claims are each rejected as being drawn to aggregations. There is no patentable combination between the exposure device and the specific developing apparatus because the broad combination is old. In this connection see the patents; 429,705, June 10, 1890, Steffens; 688,115, December 3, 1901, Pollak et al.; 740,828, October 6, 1903, Dudley; 830,741, September 11, 1906, Prentiss."

On May 13, 1908, Beidler amended by canceling the original specification and substituting therefor a new specification, in support of which he filed a supplemental oath.

On September 22, 1909, the applicant amended by adding a number of claims, among which was claim 9, as follows:

"9. In a photographic and developing apparatus, a casing having a chamber for exposing film to light, a source of supply from which film is fed to the said chamber, means for causing the film to travel after its exposure, receptacles for fluids, said fluids adapted to act on the film, and a reciprocating member adapted by its operation to subject the exposed films to the action of the fluids in the receptacles."

This claim was rejected by the examiner as follows:

"Claim 9 is rejected on Beidler, of record. There is nothing in the term 'reciprocating,' line 6, to indicate a structure warranting allowance of this claim over Beidler, since it is not obvious
20 that the reciprocation of the member controls the development. The developing attends the movement to the right of the member M, and it is immaterial as bearing on this claim whether M returns to film-receiving position by a reverse movement, or, as in Beidler, by completing a closed path.

"This claim is also met in Wight, 616,999, January 3, 1899."

On April 20, 1910, amended claims 6 and 7 were amended by Beidler to read as follows:

"6. In a photographic and developing apparatus, means for exposing film to light, a chamber in position to receive film from the exposing means, means for delivering film from the means for ex-

posing film to light directly to the chamber, receptacles in said chamber for containing fluids, means for cutting the film, and reciprocating means for subjecting successive sections of cut film to the action of the fluids.

"7. In a photographic and developing apparatus, means for exposing film to light, a chamber in position to receive film from the exposing means, means for drawing exposed film from the means for exposing film to light directly thereto, a receptacle for containing liquid, and means in the chamber mounted to reciprocate for delivering film to the receptacle, and means for cutting the drawn portion of the film."

These claims were rejected by the examiner by action of November 29, 1910, as follows:

"Claims 6 and 7 are rejected on each of Beidler, 810,388, January 23, 1906, and Wight, 616,999, January 3, 1899, viewed as with the developing means shown in each replaced by that shown in British patent to Clark, 1015 of 1899."

On February 7, 1911, Beidler, among a number of amendments, amended by adding claim 11, as follows:

"11. In a photographing and developing apparatus, means for exposing film to light, means for cutting the film, a chamber in position to receive film from the exposing means, means for drawing film to the chamber from the means for exposing the film to light, receptacles within the chamber for containing fluids, a member for moving the film and receptacles with relation to one another, said means comprising a reciprocating member mounted in the casing, and means for reciprocating the member."

This claim was rejected by the examiner, as follows:

"Claims 8 and 11 are rejected on Clark of record, since Clark has a member that reciprocates to facilitate removal of film from one to another of the fluid receptacles. These claims do not indicate that the reciprocating member actually transfers film, but only that it reciprocates with that end in view."

"These claims are also rejected as broader than applicant's disclosure, in view of the decision in Continental Paper Bag Co. v. Eastern Paper Bag Co., 136 O. G., 1297. Applicant's device merely moves the film, and a claim broad enough to cover movement of either the film or the receptacle is not warranted."

On May 23, 1911, Beidler amended his amended specification by inserting therein the following statement:

"A preferred form of construction of my apparatus will be herein described, but it is to be understood that this particular form is shown only for the purpose of illustrating one embodiment of the invention."

Also, on the same date, he amended by adding, with others, claim 20, as follows:

"20. A photographing and developing apparatus having a casing provided with an opening for exposing film to light, containers for liquids within a portion of the casing, means for feeding film after exposure into that portion of the casing having the containers for liquids, means between the feeding means and containers for grip-

ping film, means for causing the gripping means to move and draw film from one container of liquid to another, and means to cause the gripping means to release the film."

The examiner, on June 15, 1911, rejected this claim, as follows:

"Claim 20 is rejected on Steffens, 429,705, June 10, 1890. In this reference Q forms the feeding means, RR' form the gripping means, and the stripping means associated with chute u forms the means to cause the gripping means to release the film."

On May 15, 1911, Beidler filed additional claims 12 to 19, inclusive, claims 17 and 18 of which are involved in this case, and, as originally filed, were as follows:

"17. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, means for subjecting a portion of film at a time to the action of such rays, said portion thereafter being subjected to the action of a treating liquid, a liquid holder, film-feeding means situated between said holder and the source of supply of film, and a reciprocating film-moving means situated to receive the film coming from said film-feeding means.

"18. In photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, means for subjecting a portion of film at a time to the action of such rays, said portion thereafter being subjected to the action of a treating liquid, a liquid holder, film-feeding means situated between said holder and the source of supply of film, and a reciprocating film clamp situated to receive the film coming from said film-feeding means."

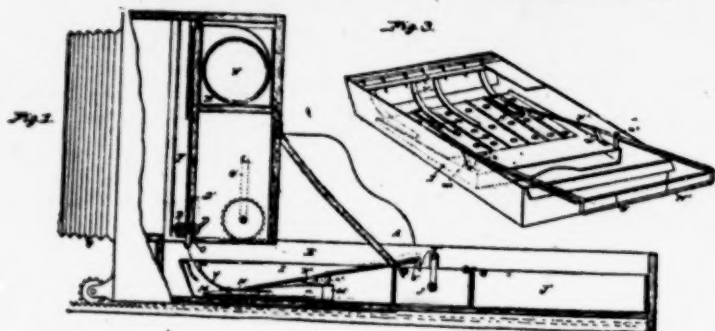
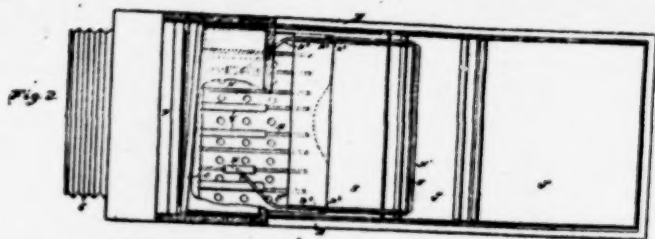
On June 27, 1911, Beidler, upon the suggestion of the examiner that the clause in these and other claims reading, "said portion thereafter being subjected to the action of a treating liquid," was superfluous, amended by canceling this clause.

On October 28, 1911, the examiner objected to claim 17 on the grounds that it "should describe means whereby the reciprocating means is moved across the receptacles," and that it "should correlate the liquid holder with the reciprocating film-moving means;" and both claim 17 and claim 18 were rejected as follows:

"Claims 8, 11, 12, 13, 14, 15, 16, 17, 18, and 19 are rejected as mere aggregations of an exposing camera and developing apparatus between which there is no cooperation as indicated in the last office action. The means for subjecting the film to expose does not cooperate with the liquid-developing means."

Upon these claims being submitted by Beidler for reconsideration, they were again, on December 26, 1911, rejected by the examiner as follows:

22 "Claims 8, 11, 12, 13, 14, 15, 16, 17, 18, and 19 are rejected as mere aggregations under *in re McNeil*, C. D. 1902, page 313. The combination of an exposing camera and a fluid-treating apparatus is old, as shown by Pollak et al. or Beidler, both of record. As the only apparent novelty in these claims lies in the fluid-treating apparatus, they should be limited to the fluid-treating apparatus *per se*."





On December 30, 1911, Beidler again submitted these claims for reconsideration; but on January 31, 1912, before action by the Patent Office, he amended by inserting the words "and having" before the words "means for subjecting." By action of February 17, 1912, the examiner granted permission to make a requested change in the drawings, and, among many objections to numerous claims, objected to claim 18 on the ground that it did not "correlate the reciprocating film clamp with the liquid holder," and again rejected claims 8 and 11 to 19 "as covering mere aggregations."

On May 3, 1912, Beidler further amended claim 17 by adding at the end thereof the clause, "so as to carry said film and subject the film to the action of liquid in the liquid holder"; and as thus amended the claim was later allowed.

Also, claim 18 was further amended by adding thereto the clause "and operative to subject the film to the liquid in the liquid holder," which amendment put the claim in the form in which it was thereafter allowed.

Claims 33 and 34 were introduced by amendment on December 30, 1911, and as introduced read as follows:

"33. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film moving means situated to receive the film coming from said film feeding means as to carry said film and subject the film to the action of a liquid in the liquid holder.

"34. In photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film clamp situated to receive the film coming from said film feeding means."

On May 3, 1912, claim 33 was amended by canceling the word "as" in the last clause of the claim; and claim 34 was amended by inserting the word "a" before the word "photographing" in the first line of the claim, in which amended form these claims were finally allowed.

Claim 40 was introduced by amendment on May 24, 1912, in the form in which it was allowed by the examiner and appears in the patent.

IV.

Beginning during the year 1911, the United States Government has used in the transaction of its business a number of photocopying machines of a type known as the photostat, which machines are made and sold by the Commercial Camera Co., of Rochester, N. Y.

The general construction of the photostat is shown by the following drawing.

(Here follows drawing marked page 23.)

23 The print-handling slide M, which is an element of the machine especially involved in the question of infringement and is best known in figure 3 of the drawings, in place in the developer tray, has a plate-like bottom resting on the bottom of the tray, with a number of perforations or holes therein, ribs, or ridges, on its upper surface for forming limited points of contact with the film or print when it rests thereon, and the clamping fingers N, attached to the ends of the finger bars N², for clamping and holding the print when it is fed between these fingers and the bottom of the slide. The finger bars N² are pivoted to vertical posts, n², rising from the body of the slide and are connected together by the handlebar N'; and the fingers N are normally held in a raised position from the bottom of the slide by the tension of the springs n³ against the undersides of the finger bars N² to allow the film or print to be fed between the fingers and the bottom of the slide. The handlebar U is connected rigidly to the rear portion of the slide.

The mode of operation of the machine is as follows:

The film roll W being in place in the film-supply receptacle B, and a portion of the film (F) being in position for the photographic exposure, the developing hood A being closed down to exclude the light from the developing chamber E, containing the developing tray I, and with the developing tray I, the fixing tray J, and the washing tray J' properly supplied with their respective fluids, and the

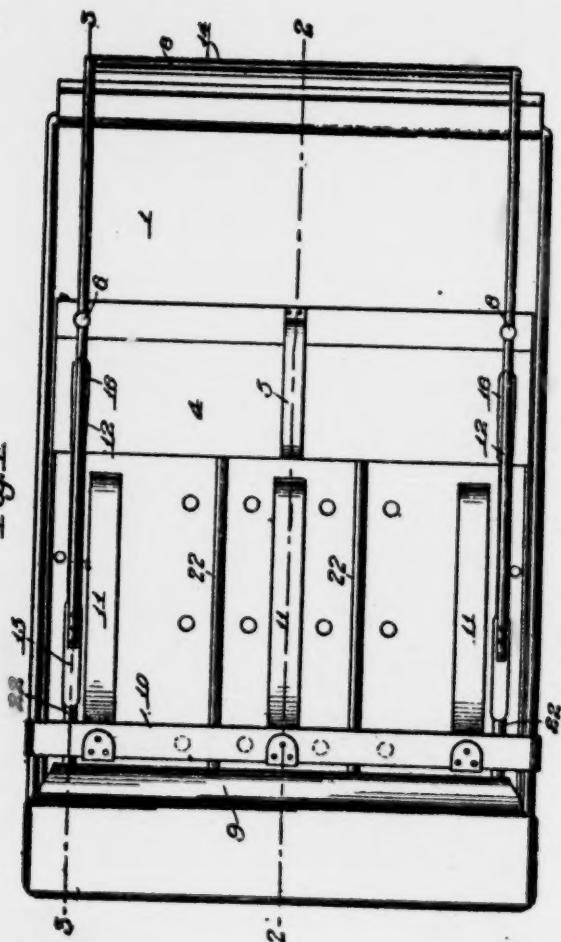
24 slide M in the developing tray being well forward in the tray for receiving the exposed film or print to be developed, the exposure of the film or sensitized paper is then made in the usual way. Then by hand-crank rotation of the film-feeding rollers D D the exposed portion of the film, or print, is fed downward through the slot just below the rollers and into the developing tray and liquid, guided by the finger guides V of the tray and passing above the bottom of the slide M and between it and the raised fingers N of the spring-supported finger bars N². The exposed section of the film, or print, is then cut off just below the film-feeding rollers by the Knife O, operated by the hand crank O', as indicated, or as in some instances, by hand lever. Then by the operator grasping and pressing together the movable handlebar N' and the fixed handlebar U of the slide M (best shown in fig. 3), the terminal fingers N of the pivoted finger bars N² are, by the resulting upward movement of the handlebar N', and against the tension of the springs n³, pressed down until the print is grasped between them and the bottom of the slide. The slide is then drawn, with the print, back in the developing tray and liquid, and any portion of the severed film next to the knife which may not already have passed into the developer is thereby drawn therein. All these movements are to be performed quickly in order that all portions of the paper shall be subjected to the action of the developing fluid as nearly as possible the same length of time, this being essential to good photographic work. When the paper has been in the developing fluid the proper length of time, ordinarily about 30 seconds, the slide M is drawn back, the rear end upward onto the back and partially out of the developing tray and chamber, bringing with it the developed print,

J. S. GREENE.
 PHOTOGRAPHIC PRINT HANDLING DEVICE.
 APPLICATION FILED MAY 19, 1911.

1,001,019.

Patented Aug. 22, 1911.

Fig. 1



No. 182
 Beidler p 25



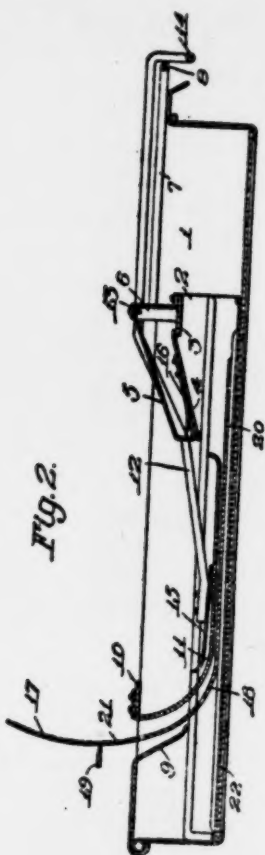


Fig. 2.

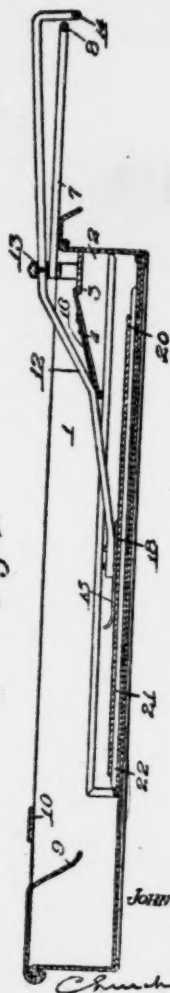


Fig. 3.

W. H. H. 1888

Nelson C. G.
Russell B. Griffith

25-1

Inventors
JOHN S. GREENE

Charles B. Rink
His Attorney

No. 782 }
Bender } p. 26
W. H. H. }
W. H. H. }



which is then drawn by the hand out of the slide and by the hand successively put through the fixing bath and the water bath in the open fixing tray J and washing tray J', thus completing the photographic process. The slide M being returned to place in the developer tray, the machine is ready for a repetition of the process, a new unexposed section of film having been brought into position for exposure by the action of the film-feeding rollers in feeding the former exposed section of film into the developer tray and liquid.

From the time of the introduction of the photostat into use in 1910, until February, 1911, these machines were not provided with the print-handling slide M, the films or prints being manipulated in the developer bath, as well as in the fixer and water baths, directly and entirely by the hands or fingers of the operators. Since February, 1911, the slide M has been furnished and used with such machines, it being manufactured by the said Commercial Camera Co. under authority from the owner of Letters Patent to Greene No. 1,001,019 of August 22, 1911, which patent is as follows:

27

United States Patent Office.

John S. Greene, of Rochester, New York, assignor, by mesne assignments, to Commercial Camera Company, of Providence, Rhode Island, a Corporation of Rhode Island. Photographic-Print-Handling Device. 1,001,019. Specification of Letters Patent. Patented August 22, 1911. Application filed May 13, 1911. Serial No. 627,041.

To all whom it may concern:

Be it known that I, John S. Greene, of Rochester, in the county of Monroe and State of New York, have invented new and useful Improvement in Photographic-Print-Handling Devices; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention relates to photography and it has for its object to provide simple and effective means for handling photographic prints incident to the process of developing, fixing, washing or otherwise treating them in a liquid bath.

The improvements are directed in part to features by the provision of which the operator is not required to immerse his hands in the liquid, and a further object of the invention is to provide a device of this character adapted for the day light method of treating the prints, particularly when fed to the apparatus from an automatic or mechanical device such as a camera that exposes a strip of sensitized material, severs the exposed portion and delivers it from treatment.

To these and other ends the invention consists in certain improvements and combinations of parts as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

(Here follows diagrams marked pp. 25 and 26.)

In the drawings: Figure 1 is a top plan view of a print handling device constructed in accordance with and illustrating one embodiment of my invention; Fig. 2 is a longitudinal section view taken substantially on the line 2—2 of Fig. 1, but showing the carrier in one position, and Fig. 3 is a similar view taken, however, on the line 3—3 of Fig. 1, and showing the carrier in another position.

Similar reference numerals in the several figures indicate the same parts.

Referring more particularly to the drawings 1 indicates a suitable pan or liquid containing receptacle that is preferably of a shape permitting it to be arranged beneath an apparatus from which the prints are automatically fed to this developing device. A preferably tray-shaped carrier 2 is arranged within the pan and preferably so proportioned as to approximately make a close fit therewith transversely thereof, but the tray is shorter than the pan so that latitude is given it for a reciprocatory movement back and forth longitudinally of the container. At the right, or what may be referred to as the forward end, of the tray is provided, in the present instance, a bridge piece 3 that spans it transversely, the same being extended inwardly and downwardly over the tray in the form of a plate 4

that may be reinforced at its center by a brace piece 5 connected thereto and to the body of 3 of the bridge. Mounted on the bridge piece are two posts 6 to which are connected, respectively, the ends 7 of the bail shaped handle 8 that extends forwardly beyond the edge of the tray, as shown, and provides means for reciprocating the latter within the receptacle.

At the opposite end the receptacle 1 is fitted with a downwardly and forwardly extending guide plate 9 and adjacent thereto with a bridge piece 10 that spans the receptacle and is adjustably mounted to slidably engage the rim thereof, and carries a plurality of downwardly and forwardly curved guiding fingers 11.

The tray 2 constitutes a holding jaw adapted to accommodate the print in a flat condition and that acts in conjunction with a relatively movable clamping jaw also forming part of the carrier. This clamping jaw is constituted, in the present instance, by a pair of arms 12, preferably pivoted at 13 in the posts 6 and connected at their outer ends by a handle portion 14 arranged adjacent to the handle portion 8 of the holding jaw 2. The inner or free ends of the arms 12 are provided in the present instance with shoes 15 that move toward and from the bottom of the tray 2 as the arms are vibrated, but which normally are held spaced from said bottom by the action of leaf springs 16 engaging beneath them and mounted, in the present instance, on the plate 4.

As before indicated, the present apparatus is adapted for use in connection with devices for mechanically feeding the prints thereto, (although such an association is not necessary to its use), and in Fig. 2 I have made a showing suggesting such a device wherein 17 indicates a continuous strip of sensitized material, fed in any desired manner, and the exposed portion 18 of which is served by a knife 19 as it is delivered to the bath. In the operation of the device, the parts are so arranged that the exposed print 18 is fed down

between the guiding plate 9 and the guiding fingers 11, being directed by the former beneath the latter so that its advancing edge 20 is thrust along well toward the front of the holding jaw or tray 2 of the carrier. As the print is severed, the rear end 21 thereof is left projecting upwardly, as shown in Fig. 2, and though the forward end 20 is submerged within the liquid, arrangements must be made for lowering and submerging this rear end 21 by the manipulation of which the front end was advanced. To effect this and dispose the print as a whole in a flat condition within the receptacle 1 and tray 2, the operator raises the handle 14 which causes the clamping jaws 12 to move downward against the tension of springs 16, and grip the forward end of the print 18 at its opposite edges. The handle 14 is preferably offset from the arms that it connects, as shown in Fig. 2, so that it is normally lower than the handle portion 8 and by pressing these two together the jaws are moved together. The carrier is then drawn forward to the position of Fig. 3 by means of either handle 8 or 14, or both of them, and the print 18, being gripped between the shoes 15 and the bottom of the tray or holding jaw 2, is also drawn forward and the rear end thereof drawn beneath the guiding fingers 11 and in this way submerged in the liquid bath. If this movement is not sufficient to draw the whole of the print beneath the guide, the clamping jaw 12 is released and allowed to rise from engagement therewith under the influence of the springs 16 and the whole carrier is then thrust rearwardly again to the position of Fig. 2. Because of its inertia, the print does not follow it in this movement immediately, if at all, and then the jaws are moved together again the print is gripped at a more rearward point so that upon drawing the carrier forward, the print is moved farther forward than before and this operation may be repeated until all of it is drawn into the bath, providing it is not too long for the receptacle. The print may also be held within the carrier and the latter moved back and forth after the print is entirely immersed and flattened out to a proper condition for the purpose of flowing the liquid over its surfaces, as is desirable in treatments of this kind.

In order to support the print in the tray or holding jaw 2 in such manner that it will not stick to the bottom thereof, I prefer to provide said bottom with a plurality of raised ribs 22 upon which the print rests with a body of liquid on both sides, and preferably the shoes 15 on the clamping jaw 12 engage the print at points in alignment with two of these ribs so that firm hold is obtained without liability of wrinkling the material.

When it is desired to remove the print, the carrier may be raised by means of the handles until its front end is above the rim of the receptacle 1 whereupon the front edge of the print becomes accessible to the operator's fingers, or any instrument he may desire to use, in order to grip it, and if he does use his fingers this is the only time at which the contents of the receptacle touches his hands. It will be noted that the carrier is operated from one end of the receptacle and the print withdrawn at the same point so that the placing of an apparatus for feeding the prints to this device above the same in a

manner to wholly or partially protect the contents of the receptacle does not interfere with the operation.

Another advantage gained from the use of a device constructed in accordance with my invention is that when the receptacle 1 is utilized as a developing pan from which the prints must be transferred to the fixing solution or hypo, there is no possibility of the latter solution being mixed in with the fixing bath which deteriorates rapidly when contaminated in this way. When an operator makes the transfer by hand, as formerly, his hands become wet with fixing solution which is carried into the developing pan in the process of handling the print therein.

I claim as my invention:

1. A photographic print handling device, comprising in combination a tray shaped holding jaw adapted to receive the print in flat condition and a pivoted clamping jaw adapted to grip the print against the bottom thereof.

2. A photographic print handling device comprising in combination a tray shaped holding jaw adapted to receive the print in flat condition and a pivoted clamping jaw embodying a pair of arms adapted to grip the print at opposite edges, respectively, against the bottom of the holding jaw.

3. A photographic print handling device comprising in combination, a tray shaped holding jaw adapted to receive the print in flat condition and provided with a projecting handle portion and a pivoted clamping jaw embodying a pair of arms adapted to grip
30 the print at opposite edges, respectively, against the bottom of the holding jaw, said clamping jaw also being provided with a handle portion connecting the arms and arranged adjacent to the handle portion of the other jaw.

4. A photographic print handling device comprising in combination a tray shaped holding jaw adapted to receive the print in flat condition and provided with a bridging portion spanning one end and a clamping jaw pivoted on the bridging portion and adapted to grip the print against the bottom of the holding jaw.

5. A photographic print handling device comprising in combination a tray shaped holding jaw adapted to receive the print in a flat condition and having a longitudinally extending raised rib on its bottom on which the print rests and a pivoted clamping jaw adapted to grip the print against the bottom of the holding jaw, and to engage the same in alinement with the rib.

6. In a photographic print handling device, the combination with a liquid containing receptacle, of a tray shaped member shorter than the receptacle arranged therein to move back and forth and adapted to receive a print in flat condition and a clamping jaw movable relatively to the tray shaped member to grip a print against the latter.

7. In a photographic print handling device the combination with a liquid containing receptacle, of a carrier arranged therein to be movable longitudinally thereof and comprising relatively movable members adapted to grip the end of a print introduced between them.

8. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier arranged therein to be

movable longitudinally thereof comprising relatively movable members adapted to grip the end of a print introduced between them, and means at one end of the receptacle for guiding a print between the members.

9. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier arranged therein to be movable longitudinally thereof comprising relatively movable members adapted to grip the end of a print introduced between them, and means at one end of the receptacle for guiding a print between the members embodying a bar adjustable on the receptacle and provided with curved fingers extending downwardly toward the bottom of the latter.

10. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier shorter than the receptacle and slidable therein comprising a tray shaped holding jaw adapted to receive a print in flat condition and a clamping jaw movable relatively to the tray shaped jaw to grip the print against the latter, and a handle on the carrier projecting beyond the receptacle and accessible from the exterior thereof.

11. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier shorter than the receptacle and slidable therein comprising a tray shaped holding jaw adapted to receive a print in flat condition and a clamping jaw movable relatively to the tray shaped jaw to grip the print against the latter, and a handle on the clamping jaw extending beyond the receptacle in all the positions of the carrier.

12. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier shorter than the receptacle, and slidable therein comprising a tray shaped holding jaw adapted to receive a print in flat condition and a clamping jaw movable relatively to the tray shaped jaw to grip the print against the latter, and handles on each jaw arranged adjacent to each other and extending beyond the receptacle in all positions of the carrier.

13. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier shorter than the receptacle and slidable therein comprising a tray shaped holding jaw adapted to receive a print in flat condition and a clamping jaw movable relatively to the tray shaped jaw to grip the print against the latter, and embodying a pair of arms arranged at opposite sides of the holding jaw to engage the print near its edges, a bridge piece spanning the tray shaped jaw at one end to and upon which the arms of the clamping jaw are pivoted, a handle portion connecting said arms and a handle portion on the holding jaw arranged adjacent thereto, both handles being arranged to extend beyond the receptacle in every position of the carrier.

14. In a photographic print handling device, the combination with a liquid containing receptacle, of a carrier shorter than the receptacle and slidable therein comprising a tray shaped holding jaw adapted to receive a print in flat condition and a clamping jaw movable relatively to the tray shaped jaw to grip the print against the latter,

and embodying a pair of arms arranged at opposite sides of the holding jaw to engage the print near its edges, a bridge piece spanning the tray shaped jaw at one end to and upon which the arms are pivoted, a handle portion connecting said arms and handle portion on the holding jaw arranged adjacent thereto, both handles being arranged to extend beyond the receptacle at one end in every position of the carrier and means at the other end of the receptacle for guiding a print edgewise between the jaws of the carrier.

JOHN S. GREENE.

Witnesses:

RUSSELL B. GRIFFITH,
NELSON COPP.

V.

The said photostats so used by the United States, defendants, were regularly purchased by the defendants either from the National Photographic Supply Co., of Washington, D. C., or from the Commercial Camera Co., of Rochester, N. Y., in the regular course of commerce and trade. The use of said machines by the defendants was without any license or authorization therefor from the claimant, and no payment has ever been made to the claimant by the defendants on account of such use.

VI.

At the time of the filing of the claimant's application for said letters patent there were in the art to which said application related a number of patents disclosing photographic machines for the same purpose and of the same general character as the claimant's machine illustrated by his said patent No. 1,057,397—that is, photographic machines for continuous-process photography, having combined and co-operating mechanical means (a) for holding a supply of 32 film (or print paper,) (b) for supplying a portion of such film in proper position in the camera for the photographic exposure and exposing the same (c) for conveying the exposed portion of film to a light-proof chamber having receptacles for developing, fixing, and washing solutions or liquids, (d) for detaching the exposed section of the film from the unexposed portion of the film supply, and (e) for conveying the exposed film successively through the developing, fixing, and washing solutions or liquids for the development and finishing of the negative or print.

In the structures disclosed by said patents all of the above enumerated means were substantially the same as in the structure or machine of the claimant's patent in suit with the exception of the means for conveying the exposed section of film through the developing and other solutions or liquids. In some of said patents this operation was performed by means of continuous, or endless, belt or apron carriers, operating upon rollers, by which the film was held and carried successively down into and up out of the trays or receptacles contain-

ing the developing, fixing, and washing solutions or liquids; and in others of the patents it was performed by manually operated reciprocating means. There was also in the printing art at the time of the claimant's application for his said patent, an automatic reciprocating device for engaging and transferring the printed sheet from the cylinder of the press to the delivery board, which device is very similar in character and action to the said film-conveying means of the claimant's patent in suit.

The following patents are disclosed in the prior art: No. 112,380, of 1871, to Ratzell; No. 117,106, of 1871, to Parker; No. 133,394, of 1872, to Waterbury; No. 157,459, of 1874, to Niel; No. 420,355, of 1890, to Perry; No. 429,705, of 1890, to Steffens; No. 475,552, of 1892, to Godfrey; No. 616,999, of 1899, to Wight; No. 1,015, British, of 1899, to Clark; No. 683,031 of 1901 to Fleischer; No. 688,115, of 1901, to Pollack & Virag; No. 740,828, of 1903, to Dudley; No. 810,388, of 1906, to Beidler; Reissue No. 12,834, of 1908, to Beidler; No. 830,741, of 1906, to Prentiss. Said patents are, by this reference thereto, made a part of these findings.

VII.

In the light of the prior art and the expert evidence in the case it does not appear that any of the improvements patented to the claimant in his said Letters Patent No. 1,057,397 have been used by the defendants in their use of the said photo-copying machines as recited in Finding IV preceding, or that said letters patent have been infringed by the defendants.

VIII.

No machine or machines within, or embodying the mechanism of, claims 17, 18, 33, 34, or 40 of the patent in suit have ever been commercially manufactured and used; nor does it appear that any machine has ever been constructed and practically operated within the claims and by the disclosed method of operation of said patent.

A small number of such machines are claimed by the plaintiff to have been manufactured, sold, and used; but it is not satisfactorily established by the evidence that these machines, as so used, were the machines of the patent in suit, it appearing that some of them were, originally, types of machines disclosed by other patents of the claimant, and that in others of these machines such changes were made in their structure and mode of operation that they were not within the disclosures and claims of the patent in suit.

An operative machine, claimed by the plaintiff to be the machine of his patent in suit, has been introduced in evidence by the plaintiff as an exhibit in the case; but to the extent that this machine is shown to have been successfully operated in the production of intended results, it has been operated, in the developing of the film, after a different method than that disclosed in the patent, in this:

By the method contemplated and disclosed in the patent, the film with the exposed side up, held at one end by the clamps attached to the rack M and moving in a plane above the pans containing the developing and fixing fluids, is intended, by the outward movement of the rack, to be drawn successively through the developing and fixing fluids, the rack moving in one direction only throughout its entire course, the end of the film next the knife and away from the clamps falling, when severed by the knife, on the surface of the developer in the first pan and submerging by gravity. By the method pursued in the operation of the exhibit machine, after the film is severed and the severed end falls on or into the developer, the rack, by means of the crank, is oscillated back and forth in a range of a few inches until by its repeated reverse action, operating against the resistance of the submerged or free end of the film, the film is finally rolled over, with its exposed side down, in the developer, and submerged. And in order to permit this changed method of operation without repeated operation of the feeding pawl S, and resultant excessive feeding of film into the developing chamber, the locations of the operating pin U and the developer tray I are materially changed from the disclosures of the patent, the pin being moved to the forward end of the rack M, near the clip N, and the developer tray being moved farther forward and partially under the knife O. Also, an inwardly projecting lip is substituted on the forward end of the developer tray instead of the outwardly projecting lip shown by the patent, this being for the purpose of facilitating the submerging of the film, and of preventing the liquor being splashed or sloshed over the end of the tray by the movement of the film therein in this new method of its repeated reciprocation, or oscillation, in the tray and liquid.

IX.

The machines of said claims 17, 18, 33, 34, and 40 of the patent in suit are not operative or useful machines when operated by the mode of operation contemplated and disclosed by the patent, for the reason that, so operated, they will not submerge all portions of the film in the developing liquid with sufficient rapidity and uniformity to secure proper development of the film.

Said machines can be rendered operative only by resorting to the new oscillating mode of operation evolved by the claimant and used in the operation of his said exhibit machine for submerging and developing the film, as described in finding VIII preceding, and by making the structural changes necessary to such changed mode of operation—that is, either changes in the location of the operating pin U and the developer tray I, or the alternative change of lengthening the feed pawl R, for the purpose of avoiding repeated operation of the pawl and excessive feeding of the film into the developing chamber by the repeated oscillation of the reciprocating rack M.

Conclusion of Law.

Upon the foregoing findings of fact the court concludes, as matter of law, that the plaintiff's said patent in suit has not been infringed by the United States, that said patent is invalid, and that the plaintiff's petition should therefore be dismissed, with judgment against the claimant in the sum of seven hundred and eighty-two dollars and thirty-two cents (\$782.32) for cost of printing the record, to be collected by the clerk as provided by law.

35

V. Judgment of the Court.

At a Court of Claims held in the City of Washington on the Twenty-ninth day of April, A. D., 1918, judgment was ordered to be entered as follows:

The Court, upon due consideration of the premises find in favor of the defendants, and do order, adjudge, and decree that George C. Beidler, as aforesaid, is not entitled to recover and shall not recover any sum in this action of and from the defendants, the United States; and that the petition be and it hereby is dismissed: And it is further ordered, adjudged, and decreed that the defendants, the United States, shall have and recover of and from George C. Beidler, as aforesaid, the sum of Seven Hundred and Eighty-two Dollars and thirty-two cents (\$782.32), the cost of printing the record in said cause in this court, to be collected by the Clerk, as provided by law.

By THE COURT.

VI. History of Proceedings After Entry of Judgment.

On June 27, 1918 the claimant filed a motion for new trial and for amended findings of fact.

On November 4, 1918 this motion was overruled by the court.

VII. Claimant's Application for, and Allowance of, an Appeal.

From the judgment rendered in the above entitled cause on November 4, 1918 in favor of defendant, the claimant, by his attorney on the 9th day of December, 1918, makes application for, and gives notice of, an appeal to the Supreme Court of the United States.

FRANK S. APPLEMAN,

Attorney for Claimant.

Filed December 9, 1918.

Ordered:

That the above appeal be allowed as prayed for.

By THE COURT.

December 9, 1918.

Court of Claims.

No. 32767.

GEORGE C. BEIDLER

VS.

THE UNITED STATES.

I, Sam'l A. Putman, Chief Clerk Court of Claims, certify that the foregoing are true transcripts of the pleadings in the above-entitled cause; of the argument and submission of case; of the findings of fact and conclusion of law filed by the court; of the judgment of the court; of the application of the claimant for, and the allowance of, an appeal to the Supreme Court of the United States.

In Testimony Whereof I have hereunto set my hand and affixed the seal of said Court of Claims at Washington City this 12th day of December, A. D., 1918.

[Seal Court of Claims.]

SAMUEL A. PUTMAN,
Chief Clerk Court of Claims.

Endorsed on cover: File No. 26,868. Court of Claims. Term No. 782. George C. Beidler, appellant, vs. The United States. Filed December 20th, 1918. File No. 26,868.

FILED
JUL 24 1919

JAMES D. MAHER,
CLERK.

IN THE
Supreme Court of the United States

GEORGE C. BEIDLER, *Appellant*,
vs.
THE UNITED STATES.

No. 7  260

APPEAL FROM THE COURT OF CLAIMS.

MOTION FOR CERTIORARI, OR, IN THE ALTERNATIVE FOR AN ORDER FOR FINDING OF ADDITIONAL FACTS BY COURT OF CLAIMS.

FRANK S. APPLEMAN,
Attorney for Claimant-Appellant.

IN THE
Supreme Court of the United States

GEORGE C. BEIDLER, *Appellant*,
vs.
THE UNITED STATES.

No. 782.

APPEAL FROM THE COURT OF CLAIMS.

MOTION FOR CERTIORARI, OR, IN THE ALTERNATIVE FOR AN ORDER FOR FINDING OF ADDITIONAL FACTS BY COURT OF CLAIMS.

Now comes George C. Beidler, and respectfully represents:

This is a suit for infringement of a patent for Photographic Record Copying Apparatus.

The petition was filed in the Court of Claims under the provisions of the Act of Congress of June 25, 1910, as follows:

"That whenever an invention described in and covered by a patent of the United States shall be hereafter used by the United States without license of the owner thereof or lawful right to use the same, such owner may recover a reasonable compensation for such use by suit in the Court of Claims: * * * *Provided further*, that in any such suit the United States may avail itself of any and all defences, general and special, which might be pleaded by defendant in an action for infringement, and set forth in Title Sixty of the Revised Statutes or otherwise: * * *"

(It is interesting to note that the Court of Claims was, by said Act, given jurisdiction in patent cases similar to the jurisdiction of the United States District Courts. However, on appeals from the District Courts, the evidence, and not merely the findings of fact, is carried to the appellate courts and while the rules of this Court do not provide for like procedure on appeal from the Court of Claims, yet, as by reason of the peculiar questions arising in patent litigation, the evidence may be of vital importance in determining questions of validity and infringement of patents it is suggested, especially in view of the change in the statute by which the jurisdiction of the Court of Claims is assimilated to that of the District Courts that the rules of this Court should not be strictly enforced in patent cases respecting what shall be brought up to this Court by way of record.

This Court, in the De Bange Gas Check case, 224 U. S. 307, indicates the desirability, and even necessity, in a patent case of a full record on the appeal, the opinion saying,

"Infringement is a question of fact and as an aid to its solution courts are furnished usually with an expert comparison of the contending devices, their identity or difference of construction, and modes of operation. *This record is destitute of such testimony.*"

Here the Supreme Court clearly indicates that the expert testimony itself, not mere findings, should appear in the appeal record, and the record in this case, as certified by the Court of Claims, is "destitute of such testimony.")

PETITION FOR CERTIORARI.

In view of the peculiar difficulty arising on the facts in a patent suit, it is thought this Court should have the whole record, as made up of the depositions of witnesses before it that was in the Court of Claims. Therefore, it is prayed that a writ of certiorari be issued under the seal of this Court, directed to the Court of Claims, sitting at Washington, D. C., commanding the Court to certify and send to this Court, on a day designated, a full and complete transcript of the record consisting of the depositions of all witnesses given on behalf of both claimant and the defendant, and all exhibits not already certified to this Court, to-wit:

Claimant's Exhibit Bernard Drawing No. 1,

Claimant's Exhibit Bernard Drawing No. 2,

Claimant's Exhibit Patent Office ruling on Pollak & Virag patent,

Claimant's Exhibit Rectigraph Copy of drawing of Beidler patent in suit,

Claimant's Exhibit Schmidt No. 1 (name plate),

Claimant's Exhibit Pamphlet "The Phostat" First Descriptive Pamphlet No. 2,

Claimant's Exhibit Pamphlet "The Photostat" Second Descriptive Pamphlet No. 4,

Claimant's Exhibit Beidler Machine Rectigraph No. 359 S. C.,

Claimant's Exhibit Williamson Prints consisting of twelve prints numbered 1 to 12, and forming collectively one exhibit,

Claimant's Exhibit Greene Patent, being U. S. Patent No. 1,001,020,

Claimant's Exhibit Dey Patent, being U. S. Patent No. 1,057,412,

Claimant's Exhibit Ruggles Cutter Patent, being U. S. Patent No. 19,046,

Claimant's Exhibit Hale Cutter Patent, being U. S. Patent No. 639,231,

Claimant's Exhibit Schmidt Prints from Claimant's Exhibit Beidler Rectigraph No. 359 S. C.,

Claimant's Exhibit Schmidt Prints from Complainant's Exhibit Beidler Rectigraph No. 359 S. C., in answer to Question 12,

Claimant's Exhibit Developed Paper Sheets, Nos. 1 and 2, Claimant's Exhibit Developed Paper Schmidt, Redirect Question 168,

Claimant's Exhibit Longer Rod,

Claimant's Exhibit Lipless Pan,

Claimant's Exhibit Adams 1883 Patent,

Claimant's Exhibit Sheppard 1899 Patent,

Claimant's Exhibit Cartnell 1905 Patent,

Defendant's Exhibit Drawing of model Beidler patented apparatus,

Defendant's Exhibit Certified Copy file wrapper and contents patent in suit,

Defendant's Exhibit Certified Copy file wrapper and contents Beidler reissue patent,

Defendants's Exhibit Gregory, *et al.*, Patent No. 1,127,231,

Defendant's Exhibit First Rectigraph Pamphlet,

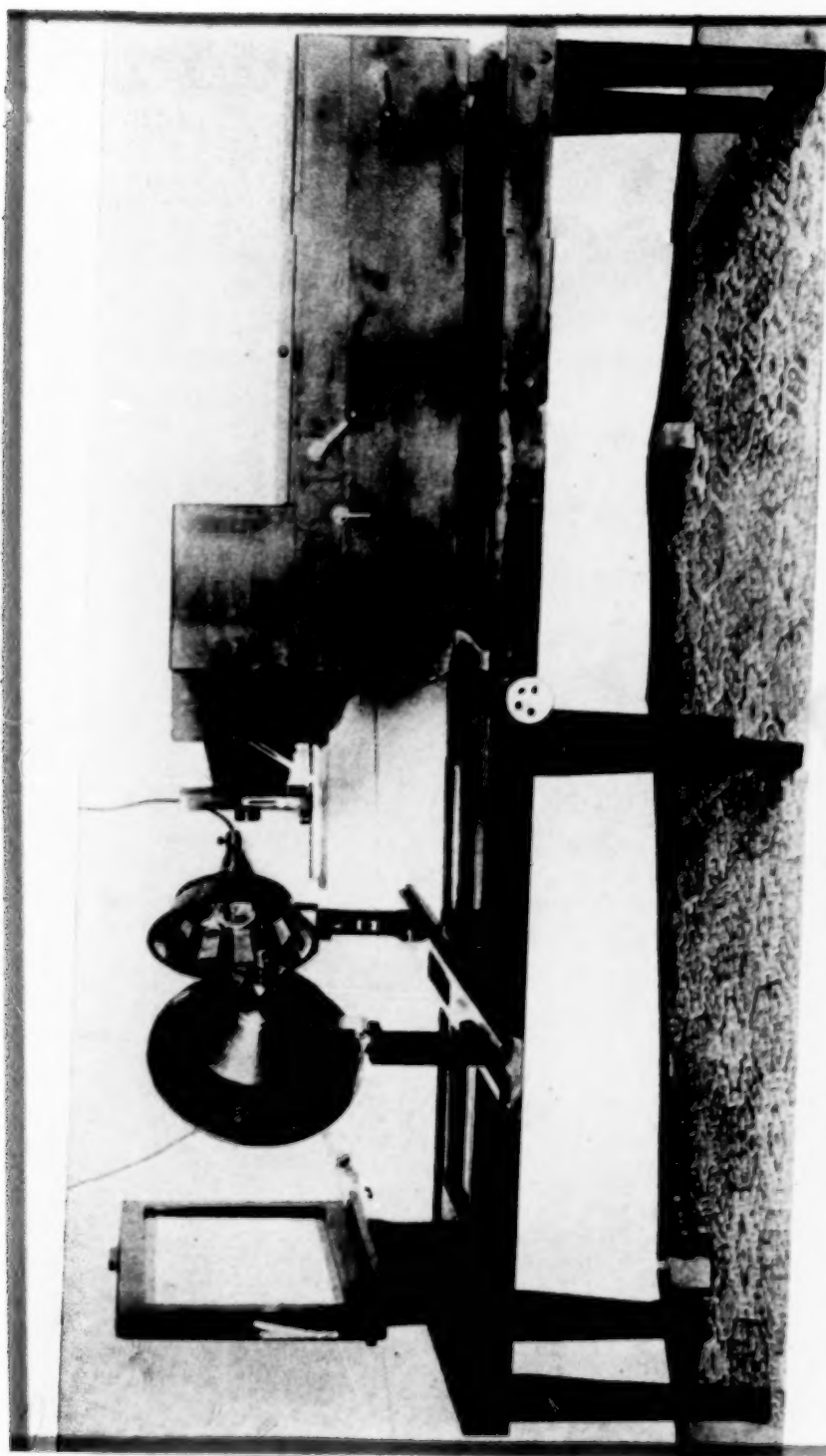
Defendant's Exhibit Second Rectigraph Pamphlet,

Defendant's Exhibit Third Rectigraph Pamphlet,

Defendant's Exhibit Waterbury Patent No. 133,394,

Defendant's Exhibit Parker Patent No. 117,106,





Defendant's Exhibit Pollak & Virag Patent No. 688,115,
 Defendant's Exhibit Beidler Patent No. 810,388,
 Defendant's Exhibit Parker-Smith marked copy of patent in suit,

Defendant's Exhibit Beidler Reissue Patent No. 12,834,
 Defendant's Exhibit Godfrey Patent No. 475,552,
 Defendant's Exhibit Neil Patent No. 157,459,
 Defendant's Exhibit Ratzell Patent No. 112,380,
 Defendant's Exhibit Perry Patent No. 420,355,
 Defendant's Exhibit Dudley Patent No. 740,828,
 Defendant's Exhibit Developing Slide,
 Defendant's Exhibit 1a, 2a, 3a, Moller Prints,
 Defendant's Exhibit 4a, 5a, 6a, Moller Prints,
 Defendant's Exhibit Certified Copy Beidler U. S. Patent No. 1,157,611,
 Defendant's Exhibit Replaced Pin U.

ALTERNATIVE MOTION FOR ORDER FOR FINDING OF ADDITIONAL FACTS.

1. One of the points of law involved in this case is, whether a certain machine offered in evidence by claimant (a photograph of which is attached hereto) to prove the operativeness of the invention of claimant's patent in suit, involved, in its construction and operation, any such material departure from what is shown, described and claimed in said patent, as under the proper legal interpretation of said patent, claimant has no right to make. That machine consists of a camera, a film magazine, film-feeding and cutting devices, and developing apparatus, and some idea of its character can be gathered from the attached photograph which, however, shows only the exterior.

2. Said point of law can not be determined without considering that machine itself and comparing it with the draw-

ing, specifications and claims of the patent, and without a complete statement of facts as to the methods pursued in operating that machine. The absolutely vital importance of this is seen from the fact that the Court of Claims found, as a fact, that said machine is operative and was successfully operated, but also found that the machine shown and described in the patent is not operative, and, therefore, the patent is invalid. Accordingly, should the Supreme Court find that said machine in its construction and concededly successful operation, is one built and operated in accordance with the proper legal meaning of the patent, then the finding of invalidity for inoperativeness must be overruled. Obviously, a merely verbal description of a machine, especially one so highly organized, is wholly incapable of conveying an adequate understanding of its construction and mode of operation. In the finding of the Court of Claims there is nothing but a verbal description of the asserted differences, both as to the construction and operation, between that machine and what is shown in the patent drawings, and that description is most meager. Said machine itself is the only means to enable its construction and successful mode of operation to be understood.

3. Another point of law is whether in view of the relation of the invention of the patent to the prior art it was, indeed, a patentable invention, and if so, the patentee is to be accorded liberal or narrow treatment in determining the questions of operativeness and patentable invention. The attitude of the courts to a patent in passing upon the validity and scope of a patent is affected or controlled by a consideration of the effect, in a practical way, that the labors of the inventor have had on the art, the obstacles to be overcome in introducing his invention into use, and the reception it met when first introduced. (*O'Rourke Engi-*

neering Co. vs. Mullen, 160 Fed. 933, C. C. A.; *Stillwell vs. McPherson*, 134 C. C. A. 611.)

The record in this case shows that when machines of the same general type (patented by claimant) were first introduced into use (which was by an installation by claimant in the General Land Office of the Interior Department in 1909) such a method of copying records was wholly new in the government bureaus, and the method in use was the primitive, slow, costly and frequently faulty one of hand-copying, by pen or typewriter. The operation of that first machine installed by claimant aroused great interest in government circles and it was the subject of reports to the Secretary of the Interior, and the Efficiency and Economy Commission, appointed by President Taft, and to a sub-committee of the Appropriations Committee of Congress, and committees from the Patent Office and other government bureaus investigated that first installation in the Land Office.

Wherefore, appellant moves that the Court of Claims be directed to make findings of the facts with sufficient fullness to enable this Court to decide the questions of law whether the patent in suit is valid, as for an operative invention; as for a patentable invention over the prior art, and is infringed by the United States, and particularly to find:

(a) Whether the machine referred to as Claimant's Exhibit Beidler Machine Rectigraph No. 359 S. C., is the machine offered in evidence in the Court of Claims, and referred to in its Finding VIII and if so, to certify the same to this Court as part of the Findings of Fact;

(b) Whether claimant did install in the General Land Office of the Interior Department, in the early part of 1909, a photographic copying machine of the general type of the patent in suit and whether at said time, such a method of copying records was new in the bureaus of the

United States Government, and the operation of that machine aroused the interest of the government officials, and was the subject of reports to the Secretary of the Interior, the Efficiency and Economy Commission, inaugurated by President Taft, and to a sub-committee of the Appropriations Committee of Congress, and if committees from the United States Patent Office and other government bureaus investigated the installation in the Land Office, and further, whether the photographic method of copying by apparatus of the Beidler type with a view to installing the same in the various government bureaus, was called in claimant's behalf to the attention of practically every division and bureau of the different departments of the Government in Washington, and if at the time of the installation of said machine by Mr. Beidler in the Land Office, the method of copying records was by hand, either by pen or typewriter.

(c) Whether claimant's Exhibit Beidler Machine Rectigraph No. 359 S. C., operates in the following manner, viz: Before severing the film, and after the rack has been moved rearward to engage the clamps with the paper, and while the paper is gripped by the clamps, the feed rollers D are revolved, and thereby the film is fed down into the developer, curving in the form of a loop, more or less, and, next the knife is operated to sever the film, and finally the rack is reciprocated and moved away from the knife, dragging along with it the now severed and submerged film which trails after it through the liquid.

(d) Whether said machine was successfully operated with a lipless pan, and with a longer rod than that machine was first provided with, and if so, whether such lipless pan is Claimant's Exhibit Lipless Pan and such rod is Claimant's Exhibit Longer Rod, and if so, to certify

said exhibits to this Court as a part of the Findings of Fact.

(e) Whether or not pans or trays for photographic developer liquids provided with inwardly projecting lips are shown in the following patents and if so, to certify copies thereof to this Court as a part of the Findings of Facts:

A. B. Sheppard, No. 639,912, September 26, 1899;
W. I. Adams, No. 289,951, December 11, 1883, and
N. Cartnell, No. 686, 266, April 4, 1905.

AFFIDAVIT OF COUNSEL.

District of Columbia, ss:

I, Frank S. Appleman, being first duly sworn, depose and say that I am attorney for the appellant, George C. Beidler, and I have read the above motion by me subscribed; that the facts therein stated are true to the best of my knowledge, information and belief, and that in my opinion the findings of the Court of Claims are insufficient to enable this Court to properly pass upon the questions of law arising on this appeal.

FRANK S. APPLEMAN.

Subscribed and sworn to before me this 18th day of July, 1919.

HENRY S. WOOD,

[SEAL]

Notary Public,

D. C.

BRIEF ON FOREGOING MOTION.

The reasons why paragraphs (a) and (b) are proper are evident and have in part been set forth in the motion.

In support of an affirmative finding as to the matter of

paragraph (b), there is the following *uncontradicted* testimony of Rittenhouse and Schmidt:

Rittenhouse:

"Question 1. Are you acquainted with George C. Beidler, the claimant in this case?

Answer. I am.

Q. 2. Under what circumstances did you become acquainted with him?

A. I became acquainted with him while I was employed at the General Land Office of the Interior Department, while I was in charge of the installation of what might be termed 'modern business methods in the bureau.' I met Mr. Beidler in connection with the installation of photographic process for the copying principally of patent records in the Land Office.

Q. 3. What methods were employed in copying records in the Land Office prior to your meeting Mr. Beidler?

A. All the records were copied by hand—that is, either pen copying or typewriting—a rather laborious process in view of the large number of records or copies that were made.

Q. 4. What method of copying land records or land patents was employed in the Land Office after you met Mr. Beidler?

A. Being in charge of the work, as above referred to, I recommended to the Commission of the Land Office in the early part of 1909 the purchase or installation of the photographic process for the making of such certified copies as were requested of the bureau and this method was adopted—the process of Mr. Beidler.

Q. 5. In your last answer you referred to a process. Will you state of what the process consisted?

A. The method that the Land Office adopted was one furnished by Mr. Beidler to the bureau and consisted of photographing a record and the machine turning out the developed print ready to be washed and

dried when it was complete. The technical operation of the machine, of course, I am not familiar with but the whole process seemed to be automatic after the exposure was made of the record desired to be copied and the machine turned out a fully developed print. A roll of paper was used and each print was automatically cut off by the machine. The print, as I recall it, was white on a dark background, or rather, it might be called a printed negative, rather than a positive print; that is, the record copied showed the writing in the finished print and the white part of the sheet dark.

Q. 6. You say that this machine was installed in the early part of 1909. Can you state how long it was used by the Land Office?

A. The machine was installed in the early part of 1909, and Mr. Beidler and Mr. Schmidt were present at the time and instructed the employees as to its use and operation, and, so far as I know, the machine is still in operation at the present time. I saw the machine in operation only a few months ago. It was in constant use from the time it was first installed.

Q. 7. Do you know whether or not reports were made of the operation of the machine about which you have testified?

A. Yes; reports were made to the Secretary of the Interior personally and in writing and the Commissioner of the Land Office included a reference to the process in his annual report for the fiscal year ended June 30, 1909. Other reports were made to the Efficiency and Economy Commission inaugurated by President Taft, and reports were also made to Appropriations Committee of Congress, or rather a subcommittee of the Appropriations Committee. These reports were made shortly after the machine was installed.

Q. 8. Do you know Mr. Woolard, chief clerk of the Patent Office?

A. I do.

Q. 9. Do you know whether or not Mr. Woolard

or any official of the Patent Office knew of the photographing and developing apparatus about which you have testified?

(Mr. Pumphrey: Objected to as calling for hearsay evidence. If Mr. Woolard's knowledge of the matter inquired about is important to the case in the opinion of claimant's counsel, the proper method of developing this point is to call upon Mr. Woolard and have him testify.)

A. Shortly after the machine was installed, there was a committee from the Patent Office and various other bureaus at the Land Office to investigate the process and determine its feasibility for adoption in these other bureaus, as I was given to understand at the time. It appeared to be something new in government work, and the adoption by the Land Office seemed to interest quite a number of bureaus of other departments."

Schmidt:

"Question 4. Are you acquainted with Mr. Woolard, who is chief clerk of the Patent Office of the United States?

Answer. I am.

Q. 5. State when and under what conditions you became acquainted with him?

A. I became acquainted with Mr. Woolard about April, 1909, at which time I was endeavoring to install photographing and developing apparatus made under the Beidler patents and inventions with the Patent Office of the United States.

Q. 6. Will you state in a general way of what those endeavors consisted, and state what was done by you in endeavoring to have the United States install photographing and developing apparatus, about which you have testified?

A. During April, 1909, I installed photographing and developing apparatus in the United States Land

Office in Washington. At the same time I endeavored to interest the other divisions, bureaus, and departments of the United States Government in the installation of the same apparatus. I called upon Mr. Woolard as chief clerk of the Patent Office and endeavored to show him where the machine could be useful to his bureau. I made copies of two different files for Mr. Woolard, and also demonstrated the photographing and developing apparatus to him on at least two different occasions. The apparatus was also demonstrated to Mr. Moore, the then Commissioner of Patents, and Mr. Tennant, the then Assistant Commissioner of Patents, all of whom were very much interested in the apparatus shown, and I confidently expected to install apparatus, which was manufactured under the Beidler patents and inventions, in the Patent Office, and was practically assured that in the event that sufficient use for such apparatus could be found that such installation would be made.

I also called on the Department of Justice, and they were contemplating the installation of the same photographing and developing apparatus.

In the Department of Agriculture the installation of the same photographing and developing apparatus was considered, and there such installation was decided upon by Mr. Carroll, the chief clerk in the Animal Bureau, but the installation was prevented by Mr. McCabe, the then Solicitor of the Department of Agriculture, he not being willing that the Department of Agriculture install such apparatus under the same contract upon which the apparatus had been installed in the General Land Office of the Department of the Interior. The same photographing and developing apparatus was called to the attention of Secretary Wilson, Secretary of Agriculture at that time. I also called upon the War Department, and they were considering the installation of the same photographing and developing apparatus for the purpose of making copies of some of the old muster rolls. Mr. Harper, who, I believe, was then Auditor of the War Department, and

Mr. Gongwer, who afterwards become Auditor of the War Department, was very much interested in this proposition, and I made photographic copies of some of the old muster rolls upon the Beidler apparatus, and we returned the sample copies to the War Department through Mr. M. O. Chance, secretary of the Economy and Efficiency Commission. Both Mr. Gongwer and Mr. Chance had been contemplating a trip to Rochester, N. Y., in order to see the operation of the Beidler photographing and developing apparatus upon these muster rolls, but they later decided to send the rolls to Rochester for copying and did not make the trip.

I also called on the Pension Bureau and interested Mr. Stauffer, the chief clerk, in these same photographing and developing apparatus; also upon the Bureau of Indian affairs and interested Mr. Hawke, chief clerk, in the same apparatus.

Mr. Boyd, chief clerk of the Library of Congress, was considering the installation of photographing and developing apparatus made under the Beidler inventions, but I understand that the installation of this apparatus was prevented by the objection of Mr. Green, the superintendent, to the contract under which installations of the Beidler apparatus were being made. During 1910 a demonstration of the Beidler apparatus was made by invitation of the Economy and Efficiency Commission at the Treasury Department. Another demonstration of the Beidler apparatus was made by invitation of the Economy and Efficiency Commission during 1911 at the office-appliance exhibition held in the G Street post-office building. There were also numerous demonstrations made at various times, using the Beidler apparatus which had previously been installed at the General Land Office for that purpose.

During the time which has elapsed since the installation of the Beidler apparatus in the General Land Office, in 1909, until the present date I have called upon practically every division and bureau of the different departments of the Government in Washington a number of times in an endeavor to install the Beidler apparatus for their work.

Q. 7. When did you first hear of the use of photostats by the Government? [Note. Photostat is the trade name of the infringing machine used by the United States.]

A. The first photostat I know of as being in use by the United States Government, I believe, was during July, 1911, when I saw the photostat in operation at the navy yard.

Q. 8. Can you fix the dates on which you endeavored to install the photographing and developing apparatus to which you referred in your answer to question 6 with relation to July, 1911; that is to say, were your efforts prior to that date? Kindly state approximately the dates when you were in Washington.

A. I was here many times prior to July, 1911, endeavoring to install the Beidler apparatus with the various departments, but I can not be positive as to the dates.

Q. 9. Are you acquainted with any of the members of the Commission on Economy and Efficiency, and, if so, state their names; whose names appear in Senate Document No. 293, Sixty-second Congress, second session, which I now show you?

A. The only one with whom I am really acquainted is Mr. M. O. Chance, the secretary of the commission.

Q. 10. Do you know whether or not he was secretary of the commission or was connected with it when you made the demonstrations in 1910 as testified in your answer to question 6?

A. I am not positive that Mr. Chance was secretary of the commission at that time. I believe he was Auditor for the Post Office Department, and at least acting as secretary of the commission at the time the Beidler apparatus was demonstrated at the Treasury Department in 1910.

Q. 11. Do you know whether or not he had anything to do with that exhibit?

A. The invitation which we received from the commission was sent out over Mr. Chance's signature.

Q. 12. Can you state whether or not this same M. O.

Chance had anything to do with the exhibit which you refer to in answer to question 6, as having been held in the G Street post office in 1911?

A. This same Mr. M. O. Chance, as secretary of the Economy and Efficiency Commission, again invited us to demonstrate the Beidler apparatus at the exhibit held in the G Street post office in 1911.

It is, of course, unnecessary to cite authority for the proposition that this Court, even in the strictest application of the rule as to what constitutes findings of fact, has power to relieve against the refusal or neglect of the Court of Claims to make a finding one way or the other, as to a matter established by uncontradicted evidence such as that of Rittenhouse and Schmidt, quoted above. In the admiralty case of *Alexander vs. Machan*, 147 U. S. 87, this Court said:

"If the Court below neglects or refuses to make a finding, one way or the other, as to the existence of a material fact which has been established by uncontradicted evidence, or if it finds such a fact when not supported by any evidence whatever, and an exception be taken, the question may be brought up for review in that particular."

The matter of paragraph (b) is also important on the question of operativeness and showing claimant to be an old and experienced inventor and manufacturer of machines of the type under consideration. It, therefore, would be incredible that a man so equipped would produce, as the Court of Claims has held, a machine incapable of use. On a remarkably similar state of facts, the Court of Appeals (Taft, Lurton and Severens) in *McCormick vs. Aultman*, 69 Fed., at page 378, said:

"It is difficult to believe that a man of Gorham's inventive genius did not perceive the useful functions which the parts of his machine so well performed, even though he did not specifically mention them all."

The matter of paragraphs (d) and (e) is material because it shows that in respect of the lip on the pan and the length of the original rod of the machine (paragraph (a)) these, even if changed from the patent disclosure (which they were not) were not necessary to the successful operation of the machines; and the testimony of Schmidt on these points is *uncontradicted*. (*Alexander vs. Machan, supra.*) He said:

"Q. 5. In connection with Mr. A. Parker Smith's answer to cross-question 62 I will ask you to substitute for the developer pan having the inwardly projecting lip in claimant's Exhibit Beidler Machine Rectigraph No. 359 S. C., a pan exactly like it for the developer liquid, but which has no inwardly projecting overhanging lip from its end wall, and place such pan without an inwardly projecting lip so that its end wall toward the cutting knife will be in the position corresponding to the position in which such wall of the developer pan is shown in the drawing of the Beidler patent in suit and shift the lever R a corresponding distance and substitute for the connecting rod now in the machine this longer rod, which is marked with the title of the case and as claimant's Exhibit "Longer Rod," then please operate the exhibit machine with these changes and with water in the pan, using the paper—that is, the sensitized paper—now in the machine.

(Mr. Workman: Objected to as beyond the limits of the Court's permission to claimant to take further testimony, such testimony being confined to the exhibit machine as it was then intro-

duced in evidence. The witness is now asked to testify concerning what is practically a different machine, with the parts materially changed and the lever R changed from its relative position in the patent to another and different position.)

A. I have substituted a pan without the inwardly projecting lip and have also substituted a longer connecting rod, shifting the lever R a corresponding distance to the rear of the machine, the pan without the inwardly projecting lip having its front edge 2 inches away from the knives toward the rear of the Beidler exhibit machine. I have cut off and submerged eight sheets of paper in the water, which is in the developer tray, these sheets being of various lengths, the longest of which being approximately 11 7-8 inches in length.

Q. 6. Did you at the request of Mr. A. Parker Smith, defendant's expert, who has been present during your examination, make and submerge one sheet longer than the others? If, so, what was the length of that sheet?

A. I did. The length of that sheet was approximately 11 7-8 inches; but this sheet was made about one-quarter of an inch longer even than I was requested to make it.

(Mr. Workman: I desire it to be understood that my last objection applies to all questions subsequent thereto, as well as to all regarding the changed condition of claimant's Exhibit Model Rectigraph 359.)

Q. 7. Why did you make the sheet longer than requested by Mr. A. Parker Smith?

A. I merely did this to demonstrate that it was possible to cut sheets of various lengths, and even longer than the machine was originally constructed to cut; and that it was practicable to entirely submerge these different lengths in the fluid in the developing pan; and also to demonstrate that the absence of the overhanging lip had no effect at all in so far as the successful submergence of the print was concerned."

The matter of paragraph (e) is material as showing that in using a lip on the original pan, claimant but followed the practice in the art which he had a legal right to do, even if his patent said nothing on the subject, since the prior art is a part of every patent.

Respectfully submitted,

FRANK S. APPLEMAN,
Attorney for Claimant-Appellant.

APPENDIX.

For the information of the Supreme Court the following extracts are made from appellant's motion in the Court of Claims for a new trial and amended and additional Findings of Fact, which motion was denied.

MOTION FOR A NEW TRIAL AND AMENDED FINDINGS OF FACT.

I.

Claimant moves for a new trial upon the following grounds:

Error in fact findings VIII and IX, that Claimant's Exhibit, Beidler Machine Rectigraph No. 359 S. C., in any material or substantial respect, departed from the disclosure of the patent in suit; that it was a departure from the teachings or disclosure of that patent to use a developer tray with an inwardly projecting lip, and that the use of such tray with a lip was necessary to successful submergence of the exposed film; and that the method of operation of said machine, which was successful, was a new one evolved after the issue of the patent and not within the contemplation of the patent.

II.

Error in fact in not finding that one skilled in the art would know from the disclosure of the patent how to successfully operate the machine to produce the intended results of photographically copying writings and other documents.

III.

Error in law in finding that the patent in suit is invalid and not infringed by the United States.

IV.

Error in law in not rendering a judgment that the patent is valid and infringed.

Respectfully,

FRANK S. APPLEMAN,
Attorney for Claimant.

CLAIMANT'S BRIEF ON MOTION FOR NEW TRIAL AND
REQUEST FOR AMENDED AND ADDITIONAL
FINDINGS OF FACT.

Comes now the claimant, by his attorney, and moves that the Findings of Fact be amended.

3. In saying that what is referred to in Finding VIII as "this changed method of operation" required the location of the operating pin U and the developer tray I to be materially changed from the disclosure of the patent, in order to prevent repeated operation of the feed pawl S, error was made, first, because nowhere in the patent is it said that any precise location of the pin U and tray I is required; and second, the uncontradicted testimony of Schmidt, Q. 5, p. 411, and the operation of said machine in the presence of Government Counsel and patent expert shows that with pan I exactly in the position shown in the patent drawing

and with the lever R shifted a corresponding distance to place it in substantially the exact location shown in the patent drawing, the machine operates with perfect success. Of course, when the lever R was thus shifted rearward, a longer rod or pawl S (Claimant's Exhibit Longer Rod) than in the original exhibit machine, was required to reach the longer distance between the ratchet wheel T and the lever R, but that did not make a different construction from what is disclosed in the patent, for the form of these parts and their actions and functions continued to be those disclosed in the patent.

4. In the last sentence in Finding VIII it is said the operative machine had a tray with an inwardly projecting lip, and that lip was for the purpose of facilitating the submerging of the film. The *uncontradicted* testimony of Schmidt, Qs. 5 to 7, p. 411, shows that no such lip is necessary, and as "Claimant's Exhibit Lipless Pan" is as much a part of the machine as the pan with a lip, there should be no such finding as to the necessity for a pan with an inwardly projecting lip; nor with any lip at all, and as it was old in the art to employ pans with lips to prevent splash, the finding should include a reference to such fact so as to show that claimant in using such a lip in his first pan merely followed the well-known practice in the art (p. 421).

It is, therefore, asked that for the last paragraph of Finding 8, the following be substituted:

An operative machine has been introduced in evidence by claimant, as an exhibit in this case, and said machine has been successfully operated in the production of the intended results of photographically copying writings upon film and developing the film. Said Exhibit machine was successfully used when provided with either of two developer trays, that is, one without an inwardly projecting lip at the end next to the knife O, and one with such an inwardly pro-

jecting lip as was common in the art long prior to claimant's patent, so that the presence or absence of such lip was immaterial to the successful submergence of the film in the developing liquid in the tray. Pans or trays provided with inwardly projecting lips are shown in the following patents which are made a part of this finding: A. B. Sheppard, No. 639,912, September 26, 1899; W. I. Adams, No. 289,951, December 11, 1883; N. Cartnell, No. 686,266, April 4, 1905.

Said Exhibit machine, which is marked "Claimant's Exhibit Beidler Machine Rectigraph No. 359 S. C.," and its two trays, one of which is marked "Claimant's Exhibit Lipless Pan," are made a part of this Finding. Such machine was made by one skilled in the art, from information furnished alone by the specifications and drawings of the Beidler patent in suit, and one so skilled and from such information successfully operated such machine, including the submergence of the film in the developer liquid by each of the following ways:

First: After the film has been exposed and severed, the severed end falls on or into the developer and the rack, by means of the crank, is reciprocated back and forth in a range of a few inches, until by its repeated reverse action, operating against the resistance of the submerged or free end of the film, the film is rolled over and submerged in the developer. In performing this operation the rack must not be moved far enough in the outward direction to cause the pin U to strike and actuate the lever R, and this is possible because the range of a few inches in reciprocation even with the lever R located as shown in the drawing of the Beidler patent, leaves abundant space for such movement of the pin U. The specification of the patent does not require that the lever R shall have any particular location beyond that it shall have such a position as to be struck by the pin U at

some point in the rearward travel of the rack. Second: Before severing the film, and after the rack has been moved to engage the clamps with the paper and while the paper is gripped by the clamps, the feed rollers D are revolved and thereby the film is fed down into the developer, curving in the form of a loop, more or less, and next the knife is operated to sever the film, and finally the rack is reciprocated and moved away from the knife, dragging with it the now severed and submerged film, which trails after it through the liquid.

Finding IX is open to the following objections:

1. The same objection is applicable to this finding in its use of the expression "mode of operation contemplated and disclosed by the patent," as to the similar expression in Finding VIII.

2. Finding IX is objectionable in saying that the admittedly successful method of operation is a "new oscillating mode of operation evolved by the claimant," first, because there is no proof that it is new in the sense evidently intended, viz: That it was subsequent to the patent, and is not disclosed by the patent, for by the uncontradicted testimony of Schmidt, who qualifies as one skilled in the art, with his knowledge as one skilled in the art, he knew from the patent alone how to operate the machine by the method referred to, and, second, because the expression "oscillating" is misleading as implying a swinging motion of the rack.

3. Finding IX is objectionable in saying structural changes were necessary in respect to the location of the pin U, the developer tray I, and the length of the feeding pawl R for the reasons above given in discussing Finding VIII.

We, therefore, ask that Finding IX be omitted altogether.

PROPOSED ADDITIONAL FINDINGS.

We move the Court to insert the following additional findings:

IX.

Photographic copying machines made under claimant's patents are known by the trade name "Rectigraph," and machines have been placed upon the market and put in use having the characteristics of construction and operation of the machine of the patent in suit (Defendant's witness Miller, X-Qs. 161 to 163, p. 306).

X.

At the time of the installation in the General Land Office of the Interior Department, in the early part of 1909 by the claimant, Mr. Beidler, of a photographic copying machine of the type of the patent in suit, such a method of copying records was new in the bureaus of the United States Government, and the operation of that machine aroused the interest of the government officials, and it was the subject of reports to the Secretary of the Interior, the Efficiency and Economy Commission, inaugurated by President Taft, and to a sub-committee of the Appropriations Committee of Congress and Committees from the United States Patent Office and other Land Office Bureaus investigated the installation in the Land Office. The photographic method of copying by apparatus of the Beidler type with a view to installing the same in the various government bureaus, was called in claimant's behalf to the attention of practically every division and bureau of the different departments of the Government in Washington. At the time of the installation of said machine by Mr. Beidler in the Land Office the method of copying records was by hand, either by pen or typewriting. (Rittenhouse, Qs. 1 to 9, pp. 8 and 9, and Schmidt, Qs. 4 to 12, pp. 10 to 12.)

In the Supreme Court of the United States.

OCTOBER TERM, 1919.

GEORGE C. BEIDLER, appellant,

v.

THE UNITED STATES.

No. 260.

APPEAL FROM THE COURT OF CLAIMS.

**BRIEF FOR THE UNITED STATES IN OPPOSITION TO
APPELLANT'S "MOTION FOR CERTIORARI, OR, IN
THE ALTERNATIVE, FOR AN ORDER FOR FINDING
OF ADDITIONAL FACTS BY COURT OF CLAIMS."**

STATEMENT.

This case is in this court on appeal from the judgment of the Court of Claims denying appellant's claim against the United States for alleged infringement of a certain patent for an improvement in photographing and developing apparatus on account of the use by the United States Government of photo-copying machines of a type known as the photostat, said machines having been purchased by the United States in the regular course of commerce

and trade. The Court of Claims concluded that the appellant's patent had not been infringed by the United States; that said patent is invalid, and entered judgment dismissing his petition. Its conclusion of law and judgment were predicated on the facts in the case as found by it, set forth on pages 4 to 28, inclusive, of the printed record.

Appellant's motion is unusual in form; in substance it is for a writ of certiorari, or, in the alternative, for an additional and different finding of facts by the Court of Claims. The motion should be disallowed for the reasons:

I. The rules of this court provide for the record on appeal from the Court of Claims and preclude the certification of evidence or exhibits.

II. The additional findings of facts requested in the alternative motion are either immaterial or contradictory to facts as found by the Court of Claims.

ARGUMENT.

I.

Appellant moves first—

That a writ of certiorari be issued under the seal of this court, directed to the Court of Claims, sitting at Washington, D. C., commanding the court to certify and send to this court, on a day designated, a full and complete transcript of the record consisting of the depositions of all witnesses given on behalf of both claimant and the defendant, and all exhibits not already certified to this court, to wit * * *.

Under the present rules of this court governing appeals from the Court of Claims there is no authority for the action requested. Rule I, made by virtue of the power given by section 243 of the Judicial Code, seems to have been made for the express purpose of preventing what appellant asks (*United States v. Adams*, 6 Wall., 101 at 110). It is well established that certiorari does not lie at all to the Court of Claims, even for a part of the evidence or for additional findings. *United States v. Adams*, 9 Wall., 661, and many other cases, unnecessary to cite. If patent cases possess inherent peculiarities which call for the abrogation of this firmly established rule no showing to this effect is made in appellant's brief.

II.

Disregarding the form of appellant's alternative motion, it is assumed that it was meant as a request for an order remanding the case to the Court of Claims for additional findings. The particular findings requested are set forth in paragraphs (a), (b), (c), (d), and (e), beginning on page 7 of appellant's brief.

Of these in their order:

(a) This paragraph shows no materiality of the finding requested; but what is really desired by appellant is that his exhibit machine itself be certified to this court. (See pars. 1 and 2 of his alternative motion, beginning on p. 5 of the brief.) This, of course, can not be done. (*United States v. Anciens Etablissements*, 224 U. S., 309.)

There can be no necessity for a further finding to identify the machine, as Finding VIII (R. p. 27) of the Court of Claims expressly recites.

"An operative machine, claimed by the plaintiff to be the machine of his patent in suit, has been introduced in evidence by the plaintiff as an exhibit in the case * * *."

As only one machine was introduced in evidence there can be no reason for further identification. The finding of the court (VIII) as to this exhibit machine is clear; it is found—

"* * * but to the extent that this machine is shown to have been successfully operated in the production of intended results, it has been operated, in the developing of the film, after a different method than that disclosed in the patent in this * * *"

Appellant now desires this court to compel the Court of Claims to change this finding and to certify the machine to this court. This can not be done (*United States v. Adams*, 9 Wall., 661).

(b) The several findings requested in this paragraph are all clearly immaterial on the question of infringement. In addition, the first part of this request for findings is negated by Finding VIII of the Court of Claims.

(c) The Court of Claims in Finding VIII found the operations or movements of the machine introduced in evidence by the appellant. Appellant now asks for an entirely different finding as to this. This court will not direct the Court of Claims as to what finding it shall make (*United States v. Adams*, 9 Wall., 661).

(d) This request is not proper for the reasons stated as to paragraph (b). The suggested finding would be contradictory to Findings VIII and IX as made by the Court of Claims. This paragraph again requests the certification of exhibits.

(e) This paragraph is objected to for the same reasons. In addition, it will be noted that the "lipless pan" and "longer rod" referred to in paragraphs (d) and (e) were changes made in the exhibit machine after it was introduced in evidence, operated and testified to by plaintiff's witnesses, and as so changed it did not represent the invention disclosed in the patent sued upon, and this is in fact found by the Court of Claims. Furthermore, there is no showing whatever as to the materiality of the finding requested.

Careful consideration of the whole motion shows that plaintiff has not pointed out any material fact supported by evidence which the Court of Claims has failed or refused to find.

For the foregoing reasons, it is submitted that appellant's motion should be denied.

ALEX. C. KING,
Solicitor General.

FRANK DAVIS, Jr.,
Assistant Attorney General.

HENRY C. WORKMAN,
Attorney.

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3-19.

IN THE
Supreme Court of the United States

OCTOBER TERM, 1918.

DOCKET No. 260.

GEORGE C. BEIDLER, APPELLANT,

vs.

THE UNITED STATES, APPELLEE.

BRIEF FOR APPELLANT.

(Appellant will herein be termed Claimant, and Appellee,
Defendant.)

STATEMENT OF CASE.

This is an appeal from the Court of Claims, by Claimant in a patent infringement suit in which the petition was filed February 14, 1914. The patent in suit issued to claimant, George C. Beidler, March 25, 1913, and is No. 1,057,397,

for improvements in Photographing and Developing Apparatus. The charge of infringement is based upon the use by the United States of certain photographic copying machines in various of its departments. The infringing machine is known and sold under the trade name of Photostat. The claims charged to be infringed are 17, 18, 33, 34 and 40. The Court of Claims found against Claimant on both infringement and validity of his patent, the finding or conclusion of non-infringement not being on the ground that the United States had not used the Photostat, the machine alleged to infringe (such use, in fact, being found in Finding IV), but seemingly because it was thought the claims in suit are not entitled to a scope that includes the Photostat, and the conclusion of invalidity being on the ground of inoperativeness of the "machines of said claims 17, 18, 33, 34 and 40."

Claimant, unsuccessfully, by motion for amended findings, T. R., p. 29, and by motion in the Supreme Court made October, 1919, sought to have certain errors in the Court's findings of fact corrected, and a desirably fuller finding of facts brought into the record on appeal. However, upon the record actually before the Supreme Court, no difficulty is apprehended of demonstrating the error of the Court of Claims in its conclusion of law on both validity and infringement.

THE ERROR OF COURT OF CLAIMS IN HOLDING PATENT INVALID.

The Court of Claims did not find that the patent claims in suit, or that the invention as defined in said claims, or any of them, is anticipated by the prior art referred to in the findings of fact; Defendant, indeed, did not ask for a conclusion of law that the patent is invalid for anticipation or want of novelty, for defendant's request for the conclusion of law ran:

"Defendant has not infringed the Beidler patent in suit; said Beidler patent in suit is invalid for vagueness and ambiguity of claims and for inoperativeness and insufficiency of disclosure."

The only bearing the Court of Claims considered the prior art to have on the case is in connection with the conclusion that Defendant has not infringed. Thus, in Finding VII, T. R., p. 27, immediately after a general analysis and listing of the patents of the prior art, the Court says:

"In the light of the prior art and the expert evidence in the case, it does not appear that any of the improvements patented to claimant have been used by the defendants," etc.,

Indeed, Finding VI, T. R., p. 26, expressly admits and points out that the prior art does not anticipate claimant's patented invention, such finding saying:

"In the structures disclosed by said patents, all of the above enumerated means were substantially the same as in the structure or machine of the claimant's patent in suit, *with the exception of the means for conveying the exposed section of film through the developing and other solutions or liquids.*"

And in said Finding VII, the Court of Claims uses the term "improvements" in referring to what Claimant had patented; that is, the Court admits and finds an advance or improvement by Claimant over the prior art. The sole question then on the infringement branch of the case, is the legal one of the construction and scope of the claims which the court found cover a new apparatus, and a new one which deserves and received from the Court, the creditable appellation of "improvements," and if their construction and scope are such as to embrace defendant's apparatus, which claimant charges infringes such claims. *Swiger v. Clamer, 192 U.S. 265*

The conclusion of law that the patent is invalid, obviously rests wholly on the erroneous finding of alleged inoperativeness of the machine of the claims in suit of claimant's patent, and the issue raised on that branch of the case is a mixed question of fact and law, the matters of fact being brought into this court by Findings VIII and IX, T. R., p. 27, and the patent itself, which is before this court as a part of the Transcript.

While the Court of Claims finds that what it terms "structural" changes from the illustration of the patent drawing, were necessary to be made, and were made to make an operative machine, and that a method of operation other than that disclosed in the patent must be and has been pursued to make the "structurally" changed machine work there is no finding of fact by the Court:

First, that the altered machine is not such a machine as the patent contemplates; and

Second, that one skilled in the art would not make the changes in relations of parts and pursue the mode of operation referred to and that such changes required an act of invention (Walker on Patents, 4th Ed., Sec. 175).

How, then, can a conclusion of law that the patent is invalid for inoperativeness of the mechanism disclosed in the drawings rest on the facts found?

The mere fact of change from the structure delineated in a patent drawing to make the machine work, does not, under the law, void the patent. It is only when the change is of a kind which would not be made by the skilled mechanic,—when it is of a kind calling for the exercise of invention, that the fact of such a change is fatal to the patent. (*Minerals, etc., vs. Hyde*, 242 U. S., 261; *Carnegie Steel vs. Cambria*, 185 U. S., 403.) On that essential and vital question, there is no finding of fact. And there are no facts on which such a deduction could be based, even if it were the

province of this court to draw deductions, which it is not (*Burr vs. Des Moines Railroad*, 1 Wall, 102).

The law on this point is well and clearly stated by the Court of Appeals for the 4th Circuit in the *Crown Cork & Seal Case*, 48 C. C. A. 72, as follows:

"The burden is upon the defendant in a case like this to prove want of utility. He must show either that it is theoretically impossible for such a device to operate or demonstrate by clear proof that a person skilled in the art to which the invention pertains has endeavored in good faith to make the patent work, and has been able to do so, and it follows that such evidence is overthrown or will be overthrown if it is demonstrated by practical experiments of credible persons that they have succeeded in producing by the patent process the results claimed by the patent." * * *

"The object of the drawings filed in the Patent Office is attained if they clearly exhibit the principles involved, and in a case like this rigid adherence to the dimensions thus exhibited is not required or expected, and if an intelligent mechanic would so proportion the dimensions as to secure practical results inutility is not demonstrated by experiments with material identical in form and proportion of parts with the drawings in the patent."

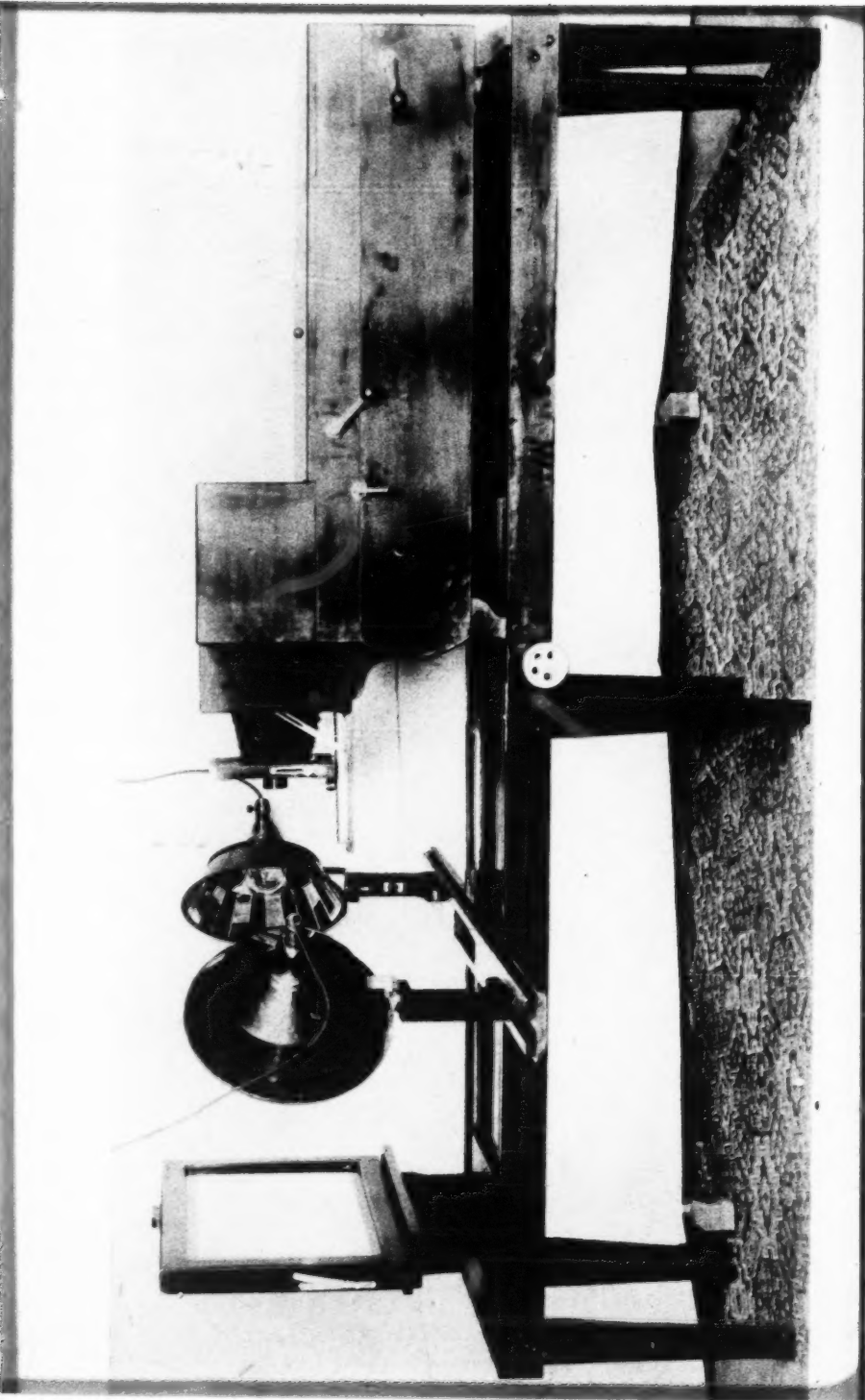
The finding in the first paragraph of Finding VIII that no machines of claims 17, 18, 33, 34 or 40 have been commercially manufactured and that it does not "appear" that any such machine has been constructed and practically operated, is without significance in the absence of a finding of explanatory facts. Mere non-use, in itself proves nothing (*Paper Bag Patent Case*, 210, U. S., 405), and mere absence of proof of construction and practical operation, is of no significance. If the Court had found as a fact that a machine or machines had actually been constructed and constructed by those skilled in the art, and operated by those

skilled in the art, and found to be impractical for defects that those skilled in the art could not cure, then the case would be on a different footing; but as it stands on the actual findings by the Court of Claims, it is not on that footing, but on the altogether different one that the *prima facie* presumption of utility or operativeness arising from the grant of the patent, stands in full and unimpaired vigor. (Crown, Cork & Seal Case, *supra*).

In fact, nowhere in the findings is there an assertion that a machine built in accordance with the patent drawings, and the specification, would be inoperative, even if literally and exactly followed, and much less is there any such finding that one skilled in the art, and without inventive acts, could not make such a machine with such departures from the drawing and description as his practical knowledge of the subject would reveal might be necessary.

It is rather curious that the Court of Claims limited such finding as it made with reference to operativeness, to machines of the claims in suit, and found nothing as to the machine as actually shown and described, and apparently that Court considered each of said claims as if it were the description of a separate machine, for in Finding IX, it advisedly used the plural form,—“machines” in its reference to the claims. Of course, unless the machine, as shown in the drawings, and as described in the specifications, is inoperative, and incurably inoperative in the hands of one skilled in the art, then an attack on its operativeness cannot succeed.

Understanding, as we do, the law to be that the burden is on one attacking the utility or operativeness of the machine shown in the drawings of a patent, and that that burden is to overcome the *prima facie* of the patent *beyond a reasonable doubt*, and that that burden requires it to be affirmatively established *as a fact* that one skilled in the art would



not be able from the teachings of the patent, to construct an operative, workable, useful machine, we submit that nowhere in the findings of fact of the Court of Claims, is there anything to justify, or support the conclusion of law that the patent is invalid for inoperativeness. Further discussion of this question of inoperativeness may therefore, be unnecessary, but the unreasonableness of the Court's finding of inoperativeness, is so clear when the law and the facts as found by the Court of Claims are considered, that we consider it our duty to go further into the matter.

At the outset, we emphasize the fact that the Court of Claims found that a machine "claimed by the plaintiff to be the machine of his patent in suit" was "An operative machine" and "shown to have been successfully operated in the production of intended results." (Finding VIII, T. R., p. 27.) With the Court's leave, we will produce that machine at the hearing, and take the liberty of placing opposite this page a reproduction of a photograph of it. That machine is literally described by each of the claims in suit of the patent, notwithstanding the variations said by the Court of Claims to have been made from the illustration of the patent drawing, for in not one of said claims is there any limitation to or anything said of the parts whose locations had to be slightly changed, or the form of the tray, whether lipped, or lipless, much less any limitation to the precise, or any particular location of these parts, or to the method of operating the machine. And all this is ascertainable by a simple comparison of the terms of the claims with what the Court of Claims in its findings says were the variations in these parts and the mode of operation of the machine, so that it is unimportant that said machine itself is not before this Court, as a piece of evidence, and that it be examined by the Court.

It is important to note that the Court of Claims, when it

says (first paragraph, Finding VIII), no machine has been constructed and practically operated "within the claims," *adds the qualification*,—"and by the disclosed method of operation of said patent." This is in effect a holding that the claims of a patent for a machine, are to be restricted to the mode of operation of the machine which the specification sets forth,—an obviously erroneous view of the law, when, as in the case at bar, the claims do not limit to that mode of operation, when they are not, and cannot be construed to be for a method or process, but are purely and wholly for a piece of mechanism.

Claimant, therefore, is in the commendable position, before this Court, of having concededly demonstrated the operativeness of a machine which is undeniably (and seemingly admitted by the Court of Claims) of a structure that is defined by each of the claims in suit, and which actually contains all the parts that are shown in the drawings of this patent, and the most and worst that can be said in criticism of the structure is that the locations of the clamp-operating pin U and the developer tray have been changed from the drawing disclosure and that instead of an outwardly projecting lip on the tray, it has an inwardly projecting lip,—the purpose of which is the obvious one of merely to prevent splashing out of liquid and is not said by the Court of Claims to have any effect on the functions performed by the other members of the machine. And the supposedly different location of the pin U is said to be merely to prevent repeated operation of the feed pawl and excessive feeding of film, but with no finding that "excessive" feed of film has any significance whatever and certainly none that it renders the machine inoperative. It might be wasteful of film, but the law will not damn a machine as useless, and strike down the patent for it merely because if built in a crude and unworkmanlike way, it is

not so economical of material as when it is built in a workmanlike manner (Walker on Patents 4th Ed. Sec. 79). A satisfactory and altogether sufficient test whether these changes are beyond the patent is, whether, if the defendant had used that identical machine, it would be held no infringement.

Another thing highly favorable to Claimant on the question of utility and operativeness is the fact that the trained experts of the Patent Office had the application for the patent under constant consideration for six years and so carefully and thoroughly considered the application that the Court of Claims was moved to say there were "numerous and repeated objections and rejections by the Patent Office" and "multitudinous amendments of specification and claims by the applicant" in response thereto. Is it believable for a moment that in all this long-drawn out, diligent and painstaking work of the Patent Office expert, he overlooked the important question of the utility or operativeness of the machine which so often, so long, and so critically he examined? It is not almost absurd, to say that this Government official,—the Patent Examiner, who holds his position by reason of his technical education and training, and knowledge of patent law, granted the patent without being satisfied that it was for a useful or operative, as well as novel, or new mechanism? We do not say that the United States is estopped in this suit to raise the defense of inoperativeness, but we cannot forbear suggesting that it is unseemly for the United States to raise such a question after taking claimant's money for his application fees, and compelling him to spend six years of labor to secure his patent, and after its own servants,—the Patent Office Officials, holding their positions because of their ability to decide such questions, and being by law charged with the duty to decide them, have solemnly held by the grant of the pat-

ent to claimant, the usefulness and operativeness of the apparatus which for six long years they scrutinized so carefully.

Having shown that there is no support for the finding in fact that the machine of the patent is inoperative, we will now explain the invention of the patent in suit and show infringement of that patent.

THE INVENTION OF THE PATENT IN SUIT.

The photo-copying apparatus of the patent in suit is not the first and only one of its kind invented by Claimant. His first patent issued in 1906, as No. 830,741, T. R., p. 27, upon an application filed three years before the application was filed for the patent in suit. In fact, he is the patentee of a number of patents relating to photo-copying apparatus, and his patented machines have been made, sold and used, T. R., p. 27, Finding VIII. In fact, as shown by the records of the Patent Office, of which perhaps this Court may take judicial notice, no less than some twenty patents for such machines issued to him between 1906 and 1917. Claimant therefore, is an experienced and active inventor of photocopying machines, and conversant with the actual requirements of these machines, in practice, and hence, the *prima facie* presumption of utility and operativeness arising from the grant of the patent is greatly strengthened by the fact of the experienced and practical source from which the machine of the patent in suit came (*McCormick vs. Aultman*, 69 Fed. 378).

The invention of the Beidler patent in suit has to do with apparatus for photographically copying or reproducing such objects as writings, drawings, etc., as will be seen from the statement appearing in the paragraph of the specification, beginning with line 9, page 1:

"This invention relates to printing and developing ap-

paratus and refers more particularly to an apparatus designed primarily for reproducing writings, drawings, pictures, or the like, novel means being also provided to convey to sensitized film through a series of receptacles containing suitable developing and fixing fluids or through suitable baths according to the requirements."

The drawing of the patent contains but two figures, one of which, figure 1, shows the machine or apparatus in vertical longitudinal section and the other, figure 2 shows it in top plan, with the top of the casing omitted.

In this machine the writing or other object is photographed directly upon sensitized paper and the paper, after receiving the image of the object, is subjected to the action of fluids suitable for the development and fixing of the image, and, briefly described, the machine comprehends a camera, a source of supply of sensitized paper, consisting of a roll thereof, in a chamber or compartment, means for drawing the paper from the roll or feeding it so that it is first exposed to the action of the camera and then presented to the treating fluids, a cutting mechanism or device for severing the exposed portion of the paper and holders or containers for the treating fluids.

The various parts of the apparatus, shown in the drawing, are contained in an oblong casing A that is supported by legs near each end. At one end of the casing is a chamber or compartment B, which contain the roll W of sensitized paper, and above the compartment B is an exposure chamber F for the camera G, such chamber containing an inclined mirror H for inverting the image and directing it to the portion of the sensitized paper below it and which is above the compartment B, having passed from the latter and being guided by rollers *b* to position to receive the image. From the rollers *b* the sensitized paper passes to and between feed rollers D, situated at the exit or rear

side of the exposure chamber F, by the revolution of which rollers the feed of the paper from the roll W is accomplished. Just beyond the feed rollers D is a knife O, which at the proper time is operated to sever or cut off the just exposed portion of the sensitized paper. The specification explains that the paper passes from the feed rollers D into a compartment E and in such compartment E is provided a series or succession of pans or tanks, as shown three in number, designated, respectively, I, J, and J¹, which are the containers or holders of the fluids or liquids used in the development and fixing of the picture on the sensitized paper, and into which the cut-off section of the latter is successively placed.

The edge of the paper, presented just beyond the knife O, is caught by a clamping device, composed of two clips N, situated to engage the paper near or at the side edges thereof. Each clip or clamp N is mounted at one end of a horizontal bar M at the top of the pans or tanks I, J, and J¹, and which is longitudinally reciprocable in the compartment E so that by the movement thereof the paper clamped by the clips may be placed in and drawn or passed through the liquid in each of said tanks or pans, and when the last pan J¹ has been reached, the clips carried back to position for engaging a newly exposed portion of the sensitized paper for the repetition of the operation just described. The clips are opened in order that they may receive the edge of the paper and also to release the section of paper when the last tank or pan is reached and, of course, they are closed after the edge of the paper has entered them in order to grip or clamp the same for transportation. In the machine shown in the drawing of the patent in suit, the opening and closing operations of the clips are produced automatically at each limit of reciprocating movement of the clips with the bar M. For this purpose a lever N² is pivoted to the side

of each of the bars M, the two levers being connected by a cross rod N¹ so that when one of them is engaged in the reciprocation of the bars M by a pin *m* at the point when the paper is to be released, or by a pin *n* at the point when the paper is to be clamped, both clips will be similarly operated. The pin *m* is designated in Fig. 2 of the drawing and the pin *n* in Fig. 1. As shown in the drawing, the paper is engaged by the clamps just after it has passed beyond the cutting device O. For reciprocating the bars M, they are provided with cog teeth which are engaged by gear wheels L upon a shaft K, which at one end has a crank for revolving it so that when said shaft is revolved in one direction, the clamp carrying bars will be moved longitudinally in one direction and when the shaft is revolved in the opposite direction, the clamp carrying bars will be moved longitudinally in the other direction.

The specification of the patent in suit explains that after the paper has been cut by the knife O, it is desirable to move the next succeeding portion of the paper a short distance beyond the knife to place it in the path of travel or reach of the clips or clamps and for this purpose the machine, which illustrates one embodiment of the invention of the Beidler patent, is provided with means for automatically acting upon the upper feed roller D to revolve it to cause the desired feeding movement. Such means consists of a ratchet wheel T on the upper feed roller D, a pawl S which at one end engages such a ratchet wheel, a lever R, to which the other end of the pawl is connected, and a pin or stud U on the upper side of one of the rack bars M, which, by the longitudinal movement of the rack bar is brought into contact with and rocks the lever R, to move the pawl S.

The function of the reciprocating paper clamp is twofold. First, it causes the subsection of the freshly ex-

posed sensitized paper to the action of the developing fluid, and second it is a transporting or carrying device by which the paper after being submerged in the developing liquid is taken therefrom and delivered to the liquid in the next following pan, or tray. Although the parts forming the organization are numerous and include all the elements for the performance of the photographic process of making the image by the camera, the development of the latent image thus produced and its fixing so that the single machine delivers, what, in reality, is a photographic copy ready for use, yet nothing is required of the operator for the achievement of this remarkable result beyond the pressing of the usual bulb to uncover the camera lens and again to cover it after the period of exposure and the manipulation of a few cranks, or handles—work that calls for no special ability, or skill whatever, but capable of being quickly learned and efficiently performed by any one.

This organization of elements is an excellent case of a true combination of elements notwithstanding that it includes a camera, that *per se* may exist as a separate entity, and parts of developing apparatus, such as the trays or pans that in themselves may exist and be used apart from the camera. In the Court below, defendant's counsel argued, but without convincing the Court, that there is no combination between the camera and the developing apparatus, which was but a reiteration of the objection made by the Examiner to certain claims of the application for the Beidler patent when pending in the Patent Office. See T. R., pp. 18 and 19. The answer to that contention of defendant is that the claims in suit do not cover merely a camera and a developing apparatus, but them and intervening elements including the feed rolls D and the knife, which tie the camera and the developing apparatus elements functionally together, and make the organized entity

of a true combination. The Patent Office Examiner saw to it that the claims of the patent in suit were worded so as to cover not the mere elements of camera and developing apparatus, but include the intervening or intermediary elements, which make the true combination.

Concerning the operation of the machine of the Beidler patent and the supposed disclosures of the patent itself in that behalf, the Court of Claims, Finding VIII, T. R., page 27, says:—

“By the method contemplated and disclosed in the patent, the film, with the exposed side up, held at one end by the clamps attached to the rack M and moving in a plane above the pans containing the developing and fixing fluids, is intended, by the outward movement of the rack, to be drawn successively through the developing and fixing fluids, the rack moving in one direction only throughout its entire course, the end of the film next the knife and away from the clamps falling, when severed by the knife, on the surface of the developer in the first pan and submerging by gravity.”

And in Finding IX, it is said that this mode of operation is inoperative because it will not submerge all portions of the film “with sufficient rapidity and uniformity to secure proper development of the film,” and the court then goes on to describe a mode of operation that is successful, terming that mode of operation, “the new oscillating mode of operation, evolved by the claimant,” but failing to find that such successful mode of operation is one that one skilled in the art would not resort to, or which called for the exercise of inventive skill for its discovery. Since the *prima facie* of operativeness of the machine of the patent has not been overcome and cannot be overcome by any finding of fact by the Court of Claims, as we have

already shown, it is not incumbent upon us to go beyond that unovercome *prima facie* and show that the expressions of the patent support the so-called "oscillating mode," which the Court of Claims found as a fact is successful. We, however, think that this can be done.

The so-called "oscillating mode" in reality involves nothing more than the reciprocation of the rack or racks M which support and carry the paper or film clamp. For some reason, not quite clear, the Court of Claims preferred the expression "oscillate" rather than "reciprocate" in referring to this movement of the rack. Both expressions, of course, mean merely a to and fro motion. The term used in the Beidler patent is "reciprocate." In describing the successful operation (See Finding VIII) the Court said, "The rack by means of the crank is oscillated back and forth in a range of a few inches until by its repeated reverse action operating against the resistance of the submerged or free end of the film, the film is finally rolled over, with its exposed side down in the developer and submerged." The "rack" referred to is the rack M of the Beidler patent and the "crank" referred to is the crank on the shaft K of the Beidler patent. This very described oscillation or reciprocation or back and forth movement of the rack by means of the crank on the shaft K is distinctly pointed to by the specification of the Beidler patent when it says T. R., page 5, "the said rack (M) being suitably guided in the compartment F and being alternately reciprocated through the rotation of the shaft in opposite directions." The specification does not say that these reciprocations are "in a range of a few inches," but it does say that the rack has a construction and arrangement by which the oscillating or reciprocating motion that was successful in submerging the print can be performed. And not only does the specification say this but numer-

ous claims of the patent which are just as much a part of the patent and the disclosure to the public of the invention and the mode of operation, thereof, as the specification, expressly states that the reciprocating or oscillating motion of the film carrier is to subject the film to the action of the developer liquid which the various tyro in the art in 1907, which was the date of the application for the Beidler patent, knew was necessary to the proper development of the latent image on the film. Thus claim 12 calls for a "to and fro moving member" for moving film holder and liquid in relation to one another, whereby the film is moved "through" the liquid in the receptacle. The expression "through" unmistakably points to submergence. Claims 17 and 18 specify a "reciprocating" film moving means or clamp to "subject the film to the action of the liquid holder." How else could the film be subjected to the action of the developer liquid except by being submerged? Again claim 40 specifies a "reciprocating development means operative to develop said exposed film." Language could hardly more plainly say that the reciprocating, or oscillating, or to and fro, movement of the film clamp or carrier is the thing that effects the development of the film, which development it was known by everybody required submergence of the film in the developer liquid.

We submit, therefore, no warrant for the view can be found that the so-called "oscillating mode" of operation found by the Court of Claims to be a wholly successful one and which involves nothing more than the capacity clearly explained by the specification of the Beidler patent of the rack or racks M to reciprocate or oscillate through a range of a few inches, is not such a mode of operation as is "contemplated and disclosed in the patent," but on the contrary is not only wholly consistent with the expres-

sions of specification and claims but is clearly disclosed thereby, and if that mode of operation is to be accepted as the test of operativeness of the machine, then the patent fully responds to that test for it is disclosed thereby.

There can be no question that had Beidler considered it necessary to amend his specification to make it describe what the Court of Claims said is the new method by which successful operation of the machine was secured, *and using the very language that Court used to describe it*, the Patent Office would have permitted, and the Courts have approved it.

The right of an applicant for a patent to amend is so large that it has been held to extend even to the repudiation of a theory of operation set up in the original specification and to complete rewriting of the specification and claims.

In *Western Electric Co. vs. Sperry Electric Co.*, et al., 58 Fed., 186-196, 7 C. C. A., 164, 173, Judge Woods speaking for the Court of Appeals for the Seventh Circuit, and with reference to an amendment to the application, said:

"At first Scribner, it is clear, believed the up-and-down compensating movement of the armature in the main circuit, irrespective of the action of the regulating magnet, to be an important feature of his lamp; but before the patent issued, without changing the drawing or modifying the structure of his device in the least, he presented an amended specification, in which he repudiated that idea, and described the armature in operation as assuming and holding a definite relation to the magnet. So long as he did not change the structure of his device or invention, he had the right to change the specification."

See also Court of Appeals for the 6th Circuit in *Cleveland Foundry Co. vs. Detroit Co.*, 131 Fed., 853.

INFRINGEMENT.

The Court of Claims, on the question of infringement, has made no structural and functional comparison of Defendant's apparatus and that of the claims of the patent in suit, and thereby made it appear that there are such differences between them as to support and justify the conclusion of law that there is no infringement. All we have, as to findings of fact on this point, is the explanation of the construction and operation of Defendant's machine, in Finding IV, and the reproduction, in Finding 1, of Claimant's patent specification, claims and drawings. What bearing the Court thought the prior art had on the question of infringement is not pointed out by the Court. The Court does not say Defendant's apparatus is like anything in the prior art. We are, therefore, concerned in this discussion only with the question whether Defendant's apparatus, as described in Finding IV is within the terms, or scope of Claims 17, 18, 33, 34 and 40, or any of them. ✓

Defendant's machine possesses all the characteristics of structure, mode of operation and capacity for work possessed by the apparatus of claimant's patent. Referring in particular to the drawing opposite, p. 18 T. R., it will be seen, like the apparatus of the plaintiff's patent in suit (the same reference letters being employed as in the Beidler patent in suit to designate the corresponding parts), there are, a camera G; a compartment B that contains a roll W of sensitized, or photographic paper; feed rollers D for drawing the paper from the roll into exposing position; a knife O to which the rollers D deliver the advancing end of the exposed portion of the paper; a number, or series of liquid-holding trays, or pans I, J and J¹ (three in number, as in the drawing of the patent in suit and arranged horizontally in a row as in the drawing of the patent in suit), and a reciprocating, or to-and-fro moving paper clamp N

which receives the forward edge of the paper as it comes from the feed rolls just as in the apparatus of the Beidler patent in suit, which clamp N, has, as in the case of the reciprocating paper clamp of the Beidler patent, the two-fold function of causing the submerging of the freshly exposed latent-image-holding paper in the developer liquid in the first pan I, and its transportation to a succeeding pan; and, as in the apparatus of the Beidler patent in suit, the various operations required for the performance of the entire photographic process are mechanically performed by the manipulation of a few cranks, or handles. The identity in structure, mode of operation, and function, or purpose of the print manipulating member of the Photostat and the same member in the apparatus of the patent in suit, is clearly and convincingly shown by the specification of the Greene patent found between pages 21 and 26, T. R., by the use of terms that describe structure, mode of operation and function that also accurately describe the same characteristics of the like member in the Beidler patent. Thus, in the Greene specification, the term "jaws" is used to describe the film clamp, and what more apt term could be used to describe the clips N of Beidler's patent, which so clearly appear in Fig. 1 as true jaws, which bite upon the interposed film? The Greene specification, uses the very term, "reciprocatory" or "reciprocating" to describe the to-and-fro motion of these "jaws" that is used in the claims in suit, of the Beidler patent; it calls the member that includes these jaws a "carrier," and the Beidler specification and certain claims use the word "carry" in referring to the action of the same member; and it describes the mode of use and function of this "carrier" in words that aptly fit the Beidler patent carrier. Thus p. 23 T. R., "The print may also be held within the carrier and the latter moved back and forth after the print is entirely immersed," etc.

Defendants, in the Court of Claims endeavored to make it appear that the "carrier" of the Photostat is not a carrier, but such a contention can be but discrediting to any one making it in the face of what it does, and the use of that exact term to describe it by Greene who patented it. Of course in respect of some details, such as the relative position of the parts and the precise form of the instrumentalities for manipulating the parts, the Photostat differs from the apparatus shown in the drawing of the Beidler patent in suit, but such differences are to be expected in an infringing device, the usual resort of the infringer being to take the invention of the patent in suit and to endeavor to disguise, or conceal it by changes of parts in matters of relative position and form. The Beidler specification anticipated that, for it was careful to say "A preferred form of construction of my apparatus will be herein described," but it is to be understood that this particular form is shown only for the purpose of illustrating one embodiment of the invention." Infringement, does not depend upon perfect imitation of the apparatus delineated in the drawings of the patent in suit, but upon the question whether the claims of the patent in suit so set forth the invention which is illustrated by the structure appearing in the drawing of the patent as to embrace defendant's embodiment of it. When the claims in suit are considered, no difficulty whatever will be had in finding that the claimant's invention has been appropriated by and is present in the Photostat.

Indeed, it is not necessary that as a matter of words, or terms, the language of a claim fit a defendant's construction. We are not to "judge about similarities, or differences by the names of things, but are to look at the machines, or their several devices, or elements in the light of what they do and to find that one thing is substantially the same as another if it performs substantially the same function in

substantially the same way to obtain the same result." *Machine Co. vs. Murphy*, 97, U. S., 120. The unimportance of difference in shape or form of corresponding devices, or elements of two machines is thus pointed out by the Court:

"Nor is it safe to give much heed to the fact that the corresponding device in two machines organized to accomplish the same result is different in shape, or form, the one from the other, as it is necessary in every such investigation to look at the mode of operation, or the way the device works, as well as the result, or the means by which the result is obtained."

THE PHOTOSTAT AND THE CLAIMS OF THE BEIDLER PATENT IN SUIT.

The invention of the Beidler patent in suit resides in, or consists of an organization or combination of co-operating elements, which constitute a photographing apparatus for converting sensitized paper supplied in large quantity to the apparatus into finished pictures, or prints, insofar as the operations of exposing, developing and fixing are concerned, and such elements are:

1. A holder of a supply of film, or sensitized paper that protects it from injury from actinic rays of light.
2. One or more liquid holders, or pans for containing the liquid, or liquids for treating the freshly exposed photograph on the film, or paper.
3. Means, such as rollers for drawing the film, or paper from the large quantity (the roll) with which the machine is supplied.
4. Means for cutting the film, or paper into copy lengths, and
5. Reciprocating, or to-and-fro moving device adapted to engage, or clamp the photograph-bearing portion of the film, or paper for that manipulation which is necessary to effect the development of the

latent photographic image and to remove the developer-acted-upon portion of film, or paper from the developer liquid for subsequent and further treatment.

The claims in suit set forth in differing forms of words the elements entering into the organization or combination, but since the invention is the combination of the elements, and not the particular construction of such elements, such, for example, as the particular form of the reciprocating, or to-and-fro moving carrier, or its instrumentalities for seizing and releasing the film, or paper; or the means for operating the paper feed rollers; or the location of the roll or film, or paper with reference to the camera, with these details the claims in suit are not concerned, but they define the elements above noted, and in particular the reciprocating or to-and-fro moving carrier in the most general terms, the claim writer having in mind the fact that the invention in its broadest scope is the general combination of elements set forth, and not the specific form of any one of them.

The particular claims in suit set forth the Beidler invention in broader and more comprehensive terms than the claims which were filed as a part of the application. It is simply a case, however, of frequent occurrence, where during the progress of an application through the Patent Office the applicant, or his attorney, redraws the claims, or presents additional claims to the end that the real invention disclosed in the original application, when its relation to the prior art is developed by the Patent Office examination, is better and more adequately claimed. *Hobbs vs. Beach*, 180 U. S., 396. There can be no question of new matter raised in this case. The claims in suit are entirely consistent with the drawings and specification as originally filed in the Patent Office, and merely define the invention as it was set forth in the original claims in terms that are more inclusive, or comprehensive—they include no element, or fea-

ture of construction not present in the original drawings and specification.

The only significance which the file wrapper and contents of the Beidler patent has, is that which Judge Mayer in the Second Circuit pointed out in *Brunswick Refrigerating Co. vs. Wolff*, 221 Fed., 639:

"The history of these letters patent, as disclosed by the file wrappers of the original patent and the divisional patents, demonstrates that the subject-matter received careful attention in the Patent Office. The inventor encountered the prior art, and the Patent Office was careful to the extent of requiring division, which was acquiesced in.

"Much is argued in regard to the proceedings in the Patent Office; but so far as these proceedings are material, they confirm the value of the presumption of validity which attaches to the issuance of letters. This is not one of the cases where, as sometimes happens, some important reference has been overlooked; but on the contrary this inventor had a long road to travel before he reached his goal."

As a matter of convenient reference in the specific application of the claims in suit to the Photostat, we quote such claims:

17. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light and having means for subjecting a portion of film at a time to the action of such rays, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film moving means situated to receive the film coming from said film feeding means so as to carry said film and subject the film to the action of liquid in the liquid holder.

18. In photographing apparatus, the combination of means for holding a supply of film, constructed to pro-

tect said film from actinic rays of light and having means for subjecting a portion of film at a time to that action of such rays, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film clamp situated to receive the film coming from said film feeding means and operative to subject the film to the liquid in the liquor holder.

33. In a photographing apparatus, the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film moving means situated to receive the film coming from said film feeding means to carry said film and subject the film to the action of a liquid in the liquid holder.

34. In a photographing apparatus, the combination of means for holding a supply of film constructed to protect said film from actinic rays of light, a liquid holder, film feeding means situated between said holder and the source of supply of film, and a reciprocating film clamp situated to receive the film coming from said film feeding means.

40. In a photographing and developing apparatus, an inclosing casing adapted to contain a supply of film and having means for exposing portions of said film to actinic light, receptacles within the casing for containing developing fluids, a reciprocating developing means operative to develop said exposed film, means for delivering the film from the exposing means to reciprocating developing means, and means for severing the film.

Comparing Defendant's machine with the invention, as it is set forth in Claim 17, it will be found that, as, is required in Claim 17, Defendant's machine is, "a photographing apparatus," consisting of the combination of

(1) "means for holding a supply of film, constructed to protect said film from actinic rays," for the sensitive paper holding compartment and the exposure compartment of Defendants' machine fulfills this recital of Claim 17;

(2) "a liquid holder," the developer holder of Defendants' machine being this element of claim 17;

(3) "film feeding means situated between said holder and the source of supply of film," the feed rollers of Defendants' machine answering to this element of the claim; and

(4) "a reciprocating film moving means, situated to receive the film coming from said film feeding means, so as to carry said film and subject the film to the action of liquid in the liquid holder," this last element being present in Defendants' machine in the reciprocating paper clamping and carrying slide that moves to and fro in the developer containing pan or tray.

Although the film, or print clamping and reciprocating device does not, as in the particular machine shown in the drawing of the Beidler patent, carry the print through the successive pans or trays, yet that difference does not save Defendants' machine from being defined by and embraced within Claim 17, because that claim in its recital of the element of the reciprocating film moving means does not limit to or require anything more than the arrangement and operation of the film or paper clamping and moving means found in Defendants' machine.

Claim 18 of the Beidler patent in suit is similar in its recitals to Claim 17, differing therefrom only in the terms in which the last element of the claim is set forth, such last element being set forth as a "reciprocating film clamp situated to receive the film coming from said feeding means and operative to subject the film to the liquid in the liquid holder." The corresponding element in Claim 17 is set forth in broader terms as "reciprocating film moving

means." Inasmuch as Defendants' machine, has a film or paper clamp, it follows that Defendants' machine, notwithstanding this difference between these two Claims 17 and 18, responds to or is defined by Claim 18.

Claim 33 is similar in its recital to Claim 17, excepting that Claim 33 does not contain the language "and having means for subjecting a portion of film at a time to the action of such rays." It will, therefore, be seen that Claim 33 is broader than Claim 17, and, since in all other respects it is like Claim 17, it follows that Defendants' machine is such a structure as is defined by Claim 33.

Claim 34 is similar to Claim 33, excepting that, instead of the broad or general recital of "reciprocating film moving means" Claim 34 specifies a "reciprocating film clamp," and in Claim 34 the functional description of the film moving means appearing in Claim 33 is absent from Claim 34. The differences between the recitals of Claims 33 and 34 do not prevent the recitals of Claim 34 from setting forth or defining the construction of Defendants' machine, and, therefore Defendants' machine, is defined by Claim 34.

Comparing Defendants' machine with Claim 40 of the patent in suit, Defendants' machine is, as stated in the claim "a photographing and developing apparatus" in which there are

(1) an "inclosing casing, adapted to contain a supply of film and having means for exposing said film to actinic light," Defendants' machine having such a casing;

(2) "receptacles within the casing containing developing fluids," Defendants' machine having several liquid holding holding pans or trays;

(3) a "reciprocating developing means operative to develop said exposed film," such means being the sliding paper clamp;

(4) "means for delivering the film from the expos-

ing means in Defendants' machine being feed rollers D; and

(5) "means for severing the film," the last element being the knife in Defendants' machine situated just beyond the feed rollers."

It is noteworthy that Claim 40, while specifying more than one receptacle, nevertheless by its broad definition of the element of the reciprocating carrier which it specifies as a reciprocating developing means, operative to develop said exposed film, does not require that the reciprocating carrier shall traverse all of the receptacles, but its terms are satisfied by a structure such as that of defendants' where the reciprocating carrier after co-operating with one tank or tray by the submergence of a print therein and its removal therefrom, in whole or in part, delivers it to the succeeding receptacle, where its further handling or manipulation may be effected by means other than the reciprocating carrier. Whether the carrier in fact moves entirely over the second tank is inconsequential, as the thing of real moment is that it is the instrumentality by which, in addition to its co-operation with the first tank for developing, the print is delivered to the second tank.

The utility of that function of the reciprocating carrier of transferring the print from the developer tray, is pointed out in the Greene Patent, No. 1,001,019, as an "advantage" of the tray and slide construction of defendants' apparatus, in the paragraph beginning line 3, page 24, of the T. R., and it is that when "an operator makes the transfer by hand" his hands, wet with fixing solution, carry the latter into the developer pan. That the transfer function of the Beidler carrier is also performed by defendants' "reciprocating slide" as shown by the specification of the Greene patent, which says; last paragraph, page 23 T. R.:

"When it is desired to remove the print, the carrier may be raised by means of the handle until its front end is above the receptacle," etc.

THE PRIOR ART.

Doubtless the Court will find it unnecessary to examine the prior art patents (even if it should have power to do so, *De Bange Gas Check Case*, 224 U. S., 307), since there is no finding of invalidity because of the prior art. However, as defendants may try to bring the prior art before the Court, it may not be amiss to discuss it in this brief and show how utterly it fails of anticipation of the claims in suit.

Nowhere in the prior art is there to be found, as in the Beidler patent in suit, a photographic copying machine having a reciprocating device for seizing or clamping a sheet or section of film, subjecting it to the action of the developer, releasing it at the end of its movement in one direction, and then returning to repeat the operation on a subsequent sheet, or section, in combination with a photographic camera, a developer-liquid holder, and severing, or cutting means.

We will consider the prior art patents in their chronological order.

Ratzell patent of 1871.—The drawings are so unintelligible and the description so meager, that an understanding of the construction is impossible. This much, however, can be understood: The apparatus uses the ancient wet plates that are coated or sensitized when used; after sensitizing a plate is exposed for the picture. It is then removed from exposing position and placed under a faucet from which developer is discharged, the plate being meanwhile held to allow the developer to pour over it by a pair of pliers, by which it is removed from the place of exposure, and the, after being "fixed," is washed with water from a bottle.

which the user conveniently (?) carries in his pocket. The clumsy and slow operation involved in the use of this apparatus may not have been unobjectionable for taking a "picture of a corpse," to which time is no object, which the specification of the patent mentions as an illustration of its use (see paragraph next to claims, second column, p. 2), but it would hardly compete with a machine such as that of the Beidler patent in suit, which enables prints to be made faster than one a minute.

Parker patent of 1871.—The apparatus of this patent is constructed for the use of glass plates or "negatives," and means, comprising two devices termed "dippers," are provided for shifting the plates about in the camera for the performance of the operations of first sensitizing the plate; then placing it in position for receiving the image from the lens; next transferring it to and dipping it into the developing bath; and, finally, placing it in the water bath. The plate is transferred from one of the "dippers" to the other. These so-called dippers are each merely a sort of vertical rack on which the plate is placed so that it stands in a vertical position, and, of course, only a stiff, rigid object like a plate of glass can be used—the limp, flexible film of paper which the Beidler machine and that of defendant uses being impossible of such a treatment.

It must be evident that in this Parker patent there is entirely absent the combination of elements of the claims in suit of the Beidler patent, which comprises means for holding a supply of film, a knife or cutter for cutting from the web of film the portion thereof containing or to form a print, a reciprocating carrier having a film-engaging clamp and liquid holders in such co-operative relation with the carrier that the film that contains the image or the print may be submerged in the liquid in one of the holders and transported therefrom to another liquid holder.

Waterbury patent of 1872.—This patent is chiefly of interest in that it shows how, even as far back as 1872, it was the practice of the Patent Office to issue patents whose drawings and specifications did not pretend to go into details of construction. In this Waterbury patent there are certain feed rollers shown and referred to for feeding the paper, but nothing is said in the specification or shown in the drawings to indicate by what means the feed rollers may be made to exert that pressure on the paper which is necessary to feed it. The roll of paper and also the feed rollers are shown in the drawings as inclosed in a casing, but with no provision described in the specification for affording access to the interior of that casing for replenishing the paper by introducing a new roll or for threading paper between the feed rollers, and no provision is made for protecting from light the print or negative after it has been made by the camera and expelled therefrom.

Any detailed description of the construction and operation of the apparatus of this Waterbury patent is unnecessary, it being sufficient, in order to show that it is not the structure of the Beidler patent in suit as specified in the claims in suit, to call attention to the fact that the patent discloses no developing means whatever and hence no reciprocating film carrier and no cutting means, but concerns itself with the matter of making the photograph at no point beyond first sensitizing the paper, then feeding it into position for taking the picture, and then discharging it from the camera where it hangs pendant therefrom, as shown in figure 2 of the drawings, leaving the further operations of developing and fixing to be performed later, but with no information as to any mode of performing them beyond the general statement that the "finishing process will be like other photographic processes now (1872) well known."

Obviously this fragmentary apparatus of the Waterbury

patent which leaves the print in the incomplete state just pointed out is not an anticipation of the complete organization of the Beidler patent in suit, by the use of which, starting with the roll of sensitized paper, all the operations of making the image, cutting the picture-containing portion of the paper from the web, developing, and fixing—are performed.

Niel patent of 1874.—This patent is for a printing press. If the Beidler patent in suit sought to protect or monopolize as a sheet-carrying device *per se* the reciprocating carrier, then this Niel patent might be of some relevancy. On the facts of the case, however, its only value is to show that it was unnecessary for Mr. Beidler in his patent in suit to point out in any detail the paper clamping means of his reciprocating carrier, for such were old and well known in sheet-carrying mechanism, as shown, for example, by this very Niel patent. What Beidler's claims set forth is a combination or organization of elements but one of which is a reciprocating carrier of any desired construction, with any available paper-engaging clamps or clips. The consideration of this Niel patent therefore simply emphasizes the fact that the Beidler patent in suit is a combination of elements which includes some form of reciprocating paper carrier which will be able to perform the function of causing the subjection of the newly exposed film to the action of developer liquid.

Perry patent of 1890.—The device of this patent is termed a "photographic dipper," and it is nothing but a simple frame having a handle and provided with clips by which it may be made to hold a plate negative. The plate to be handled is taken by the hand and one edge slid under clips or lugs at one side of the frame, and the opposite edge of the plate or negative is engaged by buttons or clips on the opposite side of the frame. This dipper of the Perry pat-

ent is merely a convenient contrivance for holding the negative after it has been removed from the camera so as to avoid contact of the fingers or the hand of the operator.

Godfrey patent of 1892.—The machine of this patent has to do with pasting strips upon druggists' boxes and it shows a reciprocating sheet conveyor which has clips or clamps to engage the edge of the sheet. This Godfrey patent has the same relevancy to the Beidler patent in suit that the Niel patent does; that is to say, it shows the commonness in the arts of that element of the Beidler invention which consists of a reciprocating carrier having clamps to engage the sheets of paper, but like the Niel patent it fails to show that element in any such or any kindred organization as the photographic apparatus of the eBidler patent in suit and which defendant employs.

Pollak & Virag patent of 1901.—The apparatus of the Pollak & Virag patent was gotten up for enabling the performance of the operations that are performed by the apparatus of the Beidler patent in suit; that is to say, beginning with a roll of film, a portion of film at a time is made to receive an image transmitted by the lens of a camera, it is then cut off by a cutter and finally by means of endless bands or tapes moving continuously in one direction it is carried in succession into several liquid holders through which the tapes or bands travel for the purpose of developing and fixing the image. The apparatus of the Pollak & Virag patent is undoubtedly an impractical one. The means by which the film is supposed to be secured or attached to the endless bands or tapes are certain sharp-pointed pins placed at intervals along the tapes or bands which are obviously incapable of retaining the film in its passage through the liquid, for there is nothing to prevent the film dropping off from these pins, which it tends to do. Even if the pins merely entered the paper and formed holes snugly fitting

on the pins, this tendency would exist with the result stated, but the condition is aggravated by the fact that inevitably **the pins will tear or elongate the film holes** where they penetrate the film. But even were the Pollak & Virag patent machine operative, it could not be regarded as an anticipation of what is set forth in the claims in suit of the Beidler patent, because of the radical difference between the two machines in that whereas in the Pollak & Virag patent the film is intended to be transported by endless bands or tapes which move continuously in one direction, in the machine of the Beidler patent there is a reciprocating or to-and-fro-moving carrier. In one case there is an elaborate organization of numerous wheels and long bands or belts, which weave back and forth over the wheels, while in the other case there is the simple device of a reciprocating carrier, which difference means a saving of cost in original manufacture and a diminution of likelihood of getting out of order.

Dudley patent of 1903.—This patent shows merely a developing tray, which is in the form of a long, narrow pan with a top or cover, and in its use a roll of film is placed in the pan in one end and the portion of the film unwound from the roll is "engaged" in some way not clearly apparent from the disclosure of the patent by what is called a "drawrod" and the film drawn from the roll lengthwise of the pan, during which operation there is no liquid in the pan. This operation having been performed, a developing solution is poured into the pan or tray and the latter is then rocked to agitate the solution and cause it to flow over the film; and then later the developing solution is poured out of the tray and a fixing solution poured in and then finally the fixing solution is poured out and the film is washed. The purpose of Dudley is to develop at the same time all of a series of images on a length of film and afterwards, by a

pair of shears, the several pictures or negatives are cut off, Dudley making no provision whatever of means as a part of his tray for cutting off the prints, and requiring none.

Beidler patent of 1906.—The machine of this patent is of the type of that of the Pollak & Virag patent, there being endless bands which move continuously in one direction, by which the sections of film or paper, after being cut from the web, are carried to and through the developing and fixing liquids. The machine of the Beidler patent in suit, therefore, is different from the machine of the Beidler 1906, patent in the particulars in which the machine of the patent differs from that of Pollak & Virag.

And every one of the claims in suit will be found to point out, or set forth, in one form of words or another, the characteristics of the Beidler invention which distinguish it from the prior art and, in particular, that combination of elements, absolutely unknown in the prior art, which includes the reciprocating film, or paper carrier, that performs the dual functions of causing the submergence of the newly-exposed print in the developer liquid and its transportation therefrom.

The judgment of the Court of Claims should be reversed.

Respectfully submitted,

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CHARLES J. WILLIAMSON,

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Washington, D. C., February, 1920.



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JAMES D. MAHER,
CLERK

IN THE
Supreme Court of the United States

OCTOBER TERM, 1918.

DOCKET No. 260.

GEORGE C. BEIDLER, *Appellant,*
vs.

THE UNITED STATES, *Appellee.*

Supplemental Brief for Appellant

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“Patents for inventions are now treated as a just reward to ingenious men and as highly beneficial to the public. * * * Patents then are clearly entitled to a liberal construction.”—Mr. Justice Story, *Blanchard v. Sprague*, 1 Robb's Pat. Cas., 734.

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SUPPLEMENTAL BRIEF FOR APPELLANT

OPERATIVENESS.

On what we believe is the only question to be considered by this Court on the defense of invalidity of the patent, to wit, operativeness, defendant's brief has not a word to say in reply to our contention that the mere fact of variation from the disclosures of the patent drawing in order to render operative the mechanism shown therein is not enough to render the patent invalid as for an inoperative thing; that invalidity for

inoperativeness can only rest on affirmative proof by defendant, as a fact, that one skilled in the art can not from the teachings of the patent construct an operative device. That silence, of course, is not due to oversight. It is a recognition of what is elementary in the law.

In defendant's brief the term "model" is used persistently and repeatedly in referring to claimant's machine mentioned in Finding VIII. This is justified by nothing in the record, and as it is misleading, we feel constrained to call attention to it. The Court of Claims nowhere uses the term "model" in referring to that machine, but calls it, as it was, a full sized, operative machine that did commercial work. Its photograph appears opposite page 7 of our main brief. Moreover, it is clear that when in Finding VIII the Court said no machines within the claims in suit had been made, it in no sense disparaged said operative machine as not a full-sized commercial machine, but undoubtedly meant merely that it was not the machine of the claims because of the changes in construction which it considered had been made from the patent drawings.

Another departure from the findings by the Court of Claims is the assertion on p. 11 of defendant's brief, that the Court of Claims found that said operative machine operated on a different "principle" from "the patented apparatus." The Court did not use the word principle at all, but its finding was that the machine was operated after a different "method" from that disclosed in the patent; that is, the manner of using the machine was different. A difference of *principle* would be fundamental. Two or more different modes of use might well involve the same principle.

When the Court of Claims says in Finding IX that the so-called oscillating method of operation was evolved by claimant, it brings the case within those decisions which hold that the construction placed by a patentee on his own patent is to be adopted and followed by the Court in ascertaining what it means. In *Safety Car etc. vs. Gould*, 229 Fed., 429, a case in which the patent was attacked for insufficient disclosure, just as in the case at bar, the Court said:

“The rule of law is that a patent, when attacked for invalidity, should be viewed in a liberal spirit, and should not only be sustained whenever possible, but the construction placed upon it by the patentee should be adopted whenever this can be done without excluding anything from it or adding anything to it, which is not fairly contained therein,” citing *Rubber Co. vs. Goodyear*, 9 Wall., 788, and *Klein vs. Russell*, 19 Wall., 433.

But concede, for argument's sake, that the specification of the Beidler patent fails, in so many words, to set forth the operation which the Court found was practiced successfully, nevertheless, under well-known decisions, the patentee is entitled to such undisclosed mode of operation. *The patent is for the machine structure, not the mode of using it.* It is not for a process or method, but for a machine made up of certain elements or members, and its identity remains no matter in what manner those members are put through their motions.

“The manner of using does not characterize a machine. This is done by its structure and capabilities.”

Sewing Machine Co. v. Frame, 24 Fed., 596-599.

The Court's finding, we respectfully submit, makes the manner of operating the machine an essential and indispensable thing, and a part of the patent, and the logic of that position would limit every patent for a machine to the particular use of it which might be mentioned in the specification, notwithstanding it could be used in a dozen different ways not described or mentioned in the specification. It is impossible that, in the case of a machine, the patentee can be denied the right to use or work it in any way in which its parts, especially those specified in the claims, having the relation and organization required by the claims, can be made to operate or function, even if the patentee himself was ignorant thereof at the date of his patent, and indeed it was a matter of subsequent discovery by him or by someone else. As well put by the Court of Appeals for the 6th Circuit in *Jackson Fence v. Peerless*, 228 Fed., 691, at 696:

"The patentee is entitled to the benefit of every function within the scope of his claims and actually possessed by his mechanism, even if he does not know of it at the time of patenting."

As the Court put it, the test is whether the mechanism within the scope of the claims *possesses the functions*. In the case at bar, since the claims in suit in nowise, either by express terms, or by construction, bring into the mechanism which they specify, the pin U, the lever R, and the position or form of the developer tray, and since the reciprocating member which they do specify, can, in combination with the other elements they specify, be made to function as the Court of Claims found it did function, there is no question that under the law Claimant cannot be de-

nied the benefit of that mode of operation of that machine which the Court found resulted in success, for beyond dispute, that mechanism is "within the scope of the claims" in suit.

Claimant, no more than Gorham in *McCormick v. Aultman*, 69 Fed., 375 (6 C. C. A.), was required by law, under penalty of losing his valuable invention, to describe in full the functions of the reciprocating rack in performing the so-called "oscillating" method, or any other successful method.

"It is not stated that the grain is compressed against the guides D but their form and direction make it a necessary result of the mechanism described. The same thing is true of the wisp by the wisp matching function of the segmental teeth.

"It is not material that Gorham did not describe in full the beneficial functions to be performed by the parts of his machine, if those functions are evident in the practical operation thereof, and are seen to contribute to the success of his device: *Eames v. Andrews*, 122 U. S., p. 40."

McCormick v. Aultman, *supra*.

That the discovery of a new mode of operating an old machine, even if a new and different result ensues, does not make the machine a different machine, see *Boston Elastic v. East Hampton*, 1 B. & A., 222.

"The inventor of a machine is entitled to the benefits of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not." *Roberts v. Ryer*, 91 U. S., 157.

Claimant in his original specification referred to his invention as a *developing* apparatus. He knew, as everyone in the art knew at the time of his application

for patent (for it was a matter of common knowledge) that to secure development it was necessary to submerge the film in the developer liquid; and he knew, as an experienced and practical inventor in this art, as did the Patent Office experts, that mere dragging of the film over the top of the liquid, trusting to gravity to cause the film to sink in the liquid would be ineffectual to cause the necessary submergence. Any child, indeed, would know that if you hold a sheet of paper by one edge and haul it over the surface of a liquid, while suspended by the held, and advancing edge, the paper will trail along over the surface of the liquid. And yet, no greater intelligence than this is imputed to Mr. Beidler, and for six long years he fought in the United States Patent Office to obtain a patent for a thing which a child would know was a piece of folly. It is not denied that Claimant clearly shows and fully describes the construction by which the racks M are mounted so as to reciprocate from end to end of the machine. It is not denied, and cannot be denied, that such racks, constructed precisely as shown in the drawings, can be reciprocated by short two and fro motions, and that so reciprocated, the film will be successfully submerged in the developer. It was no more necessary for Claimant in his specification to write out in words the instructions to operate the machine in that way than it was for Gorham to say that he compressed the grain against the guides D, and Claimant's specification was "legally sufficient" because it set forth the structure of the racks, explained how they are moved to and fro, and repeatedly in the specification and claims asserts that the proper functioning of the mechanism results in *developing* the print. Claimant told what he proposed to do, provided mechanism by

which to do it, and it is established by the Exhibit machine referred to by the Court of Claims in Finding VIII that such mechanism will do it.

We might well let the matter rest here, and let pass unnoticed, the efforts of defendant's brief to point out the changes that defendant conceives were necessary to make an operative machine, especially since for arguments sake we could cheerfully admit that such changes were necessary because defendant's efforts must be utterly unavailing for lack of the vital proof that one skilled in the art would not make such changes. However, since these very efforts of defendant reveal the weakness of this attack of inoperativeness, we cannot forbear trespassing upon the time of the Court to point it out.

It will be found that defendant's whole case on inoperativeness turns on the matter of the automatic paper feed that consists of the ratchet rod S, the lever R and the pin *u*. This is evident from the elaborate illustration on page 16 of defendant's brief and the extended exposition thereof on pp. 15 to 18 of such brief. Suppose the law, not in the broad and liberal spirit which happily it manifests towards inventors, but in the narrow spirit with which defendant's counsel deals with this matter, and which erroneously and unfortunately the Court of Claims dealt with it, should require that the patentee must not, even by so much as a hair's breadth deviate, from the crude and necessarily imperfect drawing which forms part of his patent? That could only help defendant if the matter in question should pertain to something which the patentee unmistakably made vital and indispensable to the practice of his invention. It certainly could have no significance in regard to something which was not vital, but sub-

ordinate and which could be dispensed with, and especially, if the patentee himself indicated was subordinate and inconsequential.

Obviously, if it can be shown that the patentee contemplated the omission of these parts, the ratchet rod S, the lever R, and pin *u* which have caused defendant's counsel so much trouble and on which they hang the main defense, then the whole basis for defendant's contention disappears, and no basis whatever remains for the argument against operativeness, simply by omitting those offending members from the machine—which without them, will be a complete and perfect machine,—and capable of the perfect operation which the Court of Claims found was practiced with the Exhibit machine. Defendant's whole case as to operativeness hangs on the assumption, *first*, that said parts must be used in the machine; and, *second*, that they must be used in the machine in Chinese copy of the patent drawing, even as to the precise length of the rod S, and the precise location of the pin *u* in the mistaken notion that the law in that behalf is as inflexible and inexorable as the laws of the Medes and Persians.

We know that the second proposition is arrant nonsense; but must that automatic feed consisting of rod S, lever R and pin *u* be used at all, and have we any warrant for saying the patentee contemplated its non-use? *It need not be used*, and we shall show that the patentee considered it an unimportant thing, and that *it could be dispensed with*. The feed rollers D, are rotatable by hand, and hence the automatic feed by the rod S, lever R, and pin *u* is needless. *First*, Mr. Beidler considered this automatic feed so incidental and unimportant, that in his original specification *he did not even mention it*, see T. R., pp. 14 and 15. In-

deed, he described the entire movement of the film as performed by the *hand* rotation of the feed rollers, including that short movement for projecting the advancing end of the film beyond the knife, which in his amended specification he says may be automatically done. Thus, T. R., p. 15, his original specification says:

"Any suitable means may be provided for drawing the film through the exposure chamber, but I have shown the roller D. provided with a crank handle so that as the said roller is turned, the film will be drawn through the chamber and projected under the knife where it can be engaged by the clips carried by the rack."

Second. Not one of the claims in suit refers to the automatic paper feed produced by the use of the rod S, lever R, and pin *u*. How more convincingly could it be shown than by this omission that Beidler contemplated the building of his machine without the rod S, lever R and pin *u*

To treat the rod S, lever R, and pin *u* as essential and indispensable elements, even if they could not be so arranged as to render the machine, as a whole, operative, would be an arbitrary act "for no other purpose than to render the patent worthless." *De-Bange Gas Check Case*, 224 U. S., 307.

The cuts Figs. 3 to 5 opposite page 16 of defendant's brief (which were not proven) fairly well illustrate the submergence of the film by the so-called oscillating method (which those cuts show to be a rectilinear reciprocation of the slide) and they also make it clear that the omission of the rod S, lever R and pin *u* would have no other effect than to stop the auto-

matic feed of the film, the results of which are supposed to be delineated in Figs. 3 to 6.

THE PRIOR ART.

Of the fifteen prior patents discussed in defendant's brief, eight were considered by the Patent Office during the six long years claimant's patent application was pending. (See pp. 16 to 18, T. R.) And the patents chiefly relied on by defendant, Pollak and Virag, and Beidler were among those carefully considered by the Patent Office before it adjudged claimant to have invented a new, useful, or operative and patentable machine, and entitled to the claims in suit which cover in the broadest terms the photo-copying machine which has as its striking and distinctly novel element, the reciprocating film carrier, or slide, in contradistinction to the one-direction moving endless band and pulleys of Pollak & Virag, and claimant's prior patents. That defendant's counsel virtually cast their whole defense as to the prior art on the Pollak & Virag and Beidler patents, is shown by their reproduction of the drawings of those patents and only those, at p. 29 of their brief, and the fundamental difference between claimant's reciprocating carrier type of machine and the one-way moving endless belt of said patents, is apparent at a glance when the drawings of those patents are placed alongside the drawings of the patent in suit. In those prior patents numerous rollers (at least eleven in Pollak & Virag, and at least fourteen in Beidler) and an endless carrier of great length interlaced back and forth over said rollers, are employed resulting in a costly, complex and bulky machine. In the patent before the Court, there is nothing

but a mere frame or slide, inexpensive to make, requiring but little labor to work, without complexity and making a compact machine.

“This is not one of those cases where, as sometimes happens, some important reference has been overlooked [by the Patent Office]; but on the contrary this inventor had a long road to travel before he reached his goal.”

Brunswick etc. v. Wolff, 221 F., 639.

When the Patent Office after six years consideration of the Pollak & Virag and prior Beidler patents was satisfied the present invention was patentably different therefrom, that conclusion can safely be accepted.

INFRINGEMENT.

Defendant's brief makes a curious effort to show that defendant's carrier (*a*) is not a part of the machine; (*b*) it does not reciprocate; (*c*) it is not a “developing slide in any sense.” (Brief, pp. 40 and 42.) But answering (*a*) the brief itself (p. 42) refers to the “slide remaining at all times in the developing tank”; it says that unless this member, which is no part of the machine, is used, the operator must dip his hand in the chemical, to the injury of both hand and chemical, or as defendant's brief puts it (p. 42), with “results unpleasant to operator and detrimental to the solution.” This slide, which counsel say is no part of the machine, was found indispensable by the makers who first put out machines without the slides. (Defendant's brief, p. 33.) And the Greene patent, No. 1001019, under which it is said defendant's apparatus is made, rather conclusively shows that this slide is an element in the

organization (indeed, the Court of Claims in so many words, found as a fact that it is "an element of the machine," T. R., p. 20), for it claims it in its fourteen claims as an element of the combination with the tray or pan, and in its structural relation to said pan which enables it to reciprocate therein and to participate in submerging the film in the developer, thus performing a function in that relation. For illustration we quote Claim 6 of this Greene patent (T. R., p. 24):

"6. In a photographic print handling device, the combination with a liquid containing receptacle of a tray-shaped member shorter than the receptacle arranged therein to move back and forth to receive a print in flat condition," etc.

Answering (b), Claim 6, just quoted, shows that the slide does reciprocate, for it is said to move "back and forth," and the very term "slide" used in defendant's brief in mechanics, means a reciprocating part, and unless this "slide" has a reciprocating motion, how can it be put back in the tray from the partially withdrawn position shown in the drawing on page 41 of defendant's brief? The brief (p. 36) repeating the description of the operation found in Finding IV, refers to the return of the slide into the developer tray from its partially withdrawn position.

Answering (c), we quote from the Greene patent as conclusive upon the question of the part the slide or carrier plays in developing (T. R., p. 23):

"The carrier is then drawn forward * * * and the print 18 * * * is also drawn forward and the rear end thereof drawn beneath the guiding fingers 11 and in this way submerged in the liquid bath. If this movement is not sufficient to draw the whole print beneath the guide, the clamp-

ing jaw 12 is released * * * and the whole carrier is then thrust rearwardly again to the position of Fig. 2. [This sounds like a description of a reciprocating movement of the carrier.] * * * The print may also be held within the carrier, and the latter moved back and forth after the print is entirely immersed and flattened out to a proper condition FOR THE PURPOSE OF FLOWING THE LIQUID OVER ITS SURFACES, AS IS DESIRABLE IN TREATMENTS OF THIS KIND."

That the reciprocating slide or carrier of defendant's apparatus is a member of an organization which is operatively held in a certain working relation with the remainder of the organization is shown by the statements of Mr. Greene in his patent No. 1,001,019. Thus the Greene specification reads (T. R., 22):

"A preferably tray-shaped carrier 2 is arranged within the pan and preferably so proportioned as to approximately make a close fit therewith transversely thereof, but the tray is shorter than the pan so that latitude is given it for a reciprocatory movement back and forth longitudinally of the container."

In defendants' apparatus (and that of the Beidler patent) the reciprocating carrier not only has a construction by which it is fitted to receive the paper coming from the camera, *but by the guide which is formed by the static member* (the tray in one case and the box in the other) it is constrained or kept in such co-operative relation with the camera that the two are so joined that the entire organization works in accordance with its operative law for the production from a roll of film of separate, developed prints, which law involves the

operations of making the image, removing the exposed portion of the film from the camera, delivering the same to the reciprocating carrier, and then, by means of the latter, the delivery of the developer acted on print as a separate and independent unit from the developer tray.

The importance of the completion of the submergence of the print throughout its length and the fact that the reciprocating carrier or slide of defendants' apparatus has the important function of means for carrying the film and subjecting it to the action of the developer is shown by what Mr. Greene says in his patent 1,001,019. Says Mr. Greene, T. R., p. 23, beginning at line 4, as the rear end of the print is left projecting upwardly "arrangements *must* be made for lowering and submerging this rear end." And he says further that "if one movement of the slide is not enough to draw the whole of the print beneath the guide," then it is repeatedly gripped and moved by the reciprocation of the slide. The importance of this matter of the completion of the submergence of the rear end of the print is further shown by the statement of Mr. Greene in his patent No. 1,001,020. Thus, he says: "With the operation of introducing the print thus far advanced the problem is to submerge and flatten out the rear end 12 thereof, which particularly, when fed to the developer apparatus by automatic or mechanical means, is left projecting upwardly or outwardly"; and he says that this projection "is considerable." Mr. Greene in this patent also makes it clear that the function of the reciprocating "carrier" or "tray-shaped carrier" as he terms it, is also that of the reciprocating carrier of the Beidler patent for the removal of the

film from a developer pan or tray, for he says, "the carrier is also utilized to remove the print after treatment, for which purpose it is drawn forward and raised." The "also" in the foregoing quotation refers to the other function of the carrier just previously described by him for drawing the hitherto unmerged portion of the film into the developer and repeatedly reciprocating it.

Numerous errors and misleading statements appear in the comparison in parallel columns of the machine of the patent and defendant's machine, pp. 36 to 38 of defendant's brief.

Thus, in paragraph 1, it is said the two machines differ in that one is "automatic and mechanical throughout" while the other is "hand-operated throughout." The fact is that both are hand-operated throughout and the only difference between the two machines is the point of application of the hand to the mechanical devices which are employed in both cases and which constitute the machine.

In paragraph 2 it is made to appear that the feed rolls D of defendant's machine do not advance the paper into the clips or the gripping device of the reciprocating slide. The feed rolls D of defendant's machine deliver the paper to the clips or the clamping member of the slide. The bracketed reference in paragraph 2 to the crank handle of the machine for operating the feed rolls, at once punctures the assertion that the feed rolls are hand operated, if by hand operated it is meant that no mechanical device transmits the movement of the hand to the rolls. The mechanical device of the crank handle corresponds to the mechanical device of the machine of the patent for rotating the feed rolls, also a crank handle. Since the claims in

suit are not tied up with the feature of the advance feed of the paper, but include the feed rolls broadly for the performance of the function which they perform in defendant's machine, there is no point in the distinction between the two machines in that regard. The feed rolls of the patent while they do not direct the print into the developer, do deliver it to the developer pan and hence the only difference between the two machines is the plane or level of the developer pan to which the print is delivered. In defendant's machine it is a lower level. This is not a difference of any substance and certainly not one that enters into the claims in suit.

In paragraph 3 of the comparison it is said defendant's cutter 0 has nothing to do with the print getting into the developer pan. Until the cutter 0 of defendant's machine is operated it will hardly be said that all of the print is in the developer pan (at least a third is out; see drawing opposite p. 36, defendant's brief), and hence it is evident that the cutter 0 of defendant's machine does have something to do with getting the print into the developer pan.

The comparison of paragraph 4 is apparently on the theory that automatic action means an action which is produced through intervening mechanism even if the hand of the operator be the source of power that is transmitted. Even on that theory there is no real distinction between the two machines because in both machines appliances intervene between the point of application of the hand and the paper-engaging device. In the machine of the patent it is the crank which operates through rack and pinion and in defendant's machine it is the handle of the developer slide whose movements produced by the hand are transmitted through mecha-

nism to the print-engaging or clip part of the slide. Since defendant's slide is opened by the action of a spring it is truly automatic in its opening operation.

In the comparison in paragraph 5 reference to the direct application of the operator's hand in the case of defendant's machine is misleading and the statement that the slide of defendant's is not for the purpose of conveying or transporting, but to obviate the staining of the operator's fingers and contaminating the solution is ridiculous. The use of this mechanical device for moving the print through the developer and for transporting it out of the developer pan, and its being a co-operating part of the organization, is not changed by the thing which lead to its use, namely, the desirability of avoiding stain of the fingers and contamination of the solution. It is not a question of the purpose for which the thing is used or the reason for its use, but the fact of its use.

It is impossible to see any real distinction made in the comparison of paragraph 6 even if the facts are as stated. But they are not. In both machines the handle for the manipulation of the slide for development is on the outside of the machine. It is not true as stated in paragraph 6 with reference to defendant's machine, that the manipulation of the print is by means of the hands in any sense in which the hands are not used in the operation of the machine of the patent.

The comparison in paragraph 7 is not correct particularly in the statement that in defendant's machine there is no mechanism for removing the print from the developer to the succeeding baths because in defendant's machine the slide is used in the operation of transferring the print from the developer to the next bath.

Of course defendant has not copied the machine illustrated in the drawings of claimant's patent *in all its details*. Defendants rarely do that. They take the substance and try to conceal it by superficial changes. Sometimes they do as defendant did here. They employ an inferior construction and sometimes even impair the functions of parts. Defendant's slide is clumsy or crude compared with the corresponding member of the patent in suit and defendant manipulates that slide so as not to secure the advantage of *complete* transportation of the print from one bath to another. The use of an imperfect form of a device is characterized by the Court of Appeals for the Second Circuit in *Van Kannel v. Straus*, 235 Fed., 135, as a "subterfuge which the courts will not pass."

"The impairment of the function of a part of a patented construction by omitting a portion will not avoid infringement."

Manton-Gaulin v. Dairy, 238 Fed., 210.

"We think O'Brien's construction comes within the settled rule that infringement is not avoided by impairment in degree, so long as the distinguishing function is retained."

Murray v. Detroit, 206 Fed., 465 (C. C. A. 6).

Defendant in its slide retains the "distinguishing function" of the invention of the patent in suit, for it is a reciprocating print clamping device that receives the print fed from the camera by the feed rolls and cut off by the knife; it passes the seized print through the developer and it carries the print from the developer to the next bath, imperfectly it is true, that is to say, it does not take the print completely over into the succeeding bath but it takes it partially over, but unless it

took it partially over the hands of the operator would be stained and the solution contaminated because it would be necessary to reach the hands into the developer, so that the most that can be said for defendant's slide in respect of this transporting function is that it but partially does the work of the slide of the patent in suit and thus amounts to the familiar subterfuge of an impairment of function in degree.

It is to be borne in mind that the expression "reciprocate," as used in the claims in suit, need have no other meaning to embrace defendant's machine than that contended for by defendant, namely, a motion first in one direction between the point where the carrier clamps the film and the point where the film is released, and then in the opposite direction to repeat the film engaging and transporting operation. The term "reciprocate" need not be understood to mean the short reciprocations by which submergence is effected in claimant's machine, although obviously it does include such short reciprocations, which according to the Greene patent are used in the normal operation of defendant's machine.

For convenient comparison of the drawings of claimant's patent and the drawings of defendant's machine, copies thereof are inserted at the back of this brief.

CRITICISM OF CLAIMS.

We do not consider it necessary to answer in detail the supertechnical, hypercritical discussion in defendant's brief of the claims. Reference to part will suffice. What possible importance can it be that some of the claims use the general designation "photographing apparatus" and others "photographing and developing apparatus?" The supposed difficulty in un-

derstanding Claims 17 and 18 would have disappeared if the destructive critic had not overlooked the preamble in each claim, "In a photographing apparatus" (which he omits from his supposed quotation, p. 48). What these claims call for is a "photographing apparatus" in which are found the various elements recited therein and all those elements are readily understood by reference to specifications and drawing.

This attack upon the claims is but another manifestation of the notion on defendant's part shown by the attack on the validity of the patent for inoperativeness or insufficiency of disclosure, that that construction of a patent is to be resorted to, if possible, which will destroy and not save it; that an inventor is to be treated as if taking something from the public instead of as a benefactor. The true attitude, the one in consonance with the purpose of the provision of the Constitution on the subject, was long ago pointed out by Judge Story in *Blanchard v. Sprague*, 1 Robb's Pat. Cases, 734, as follows:

"Patents for inventions are now treated as a just reward to ingenious men, and as highly beneficial to the public * * * as ultimately securing to the whole community great advantages.
• • •

"In America this liberal view of the subject has always been taken; and, indeed, it is a natural, if not a necessary result, from the very language and intent of the power given to Congress by the Constitution, on this subject, * * * Patents then are clearly entitled to a liberal construction since they are not granted as restrictions upon the rights of the community, but are granted to 'promote science and useful arts.'"

Not only has claimant's patent been attacked upon a perverted and mistaken view of the law, but it is asserted on page 19 of defendant's brief that he is using his patent and this suit with an ulterior motive; it is said he is trying to bludgeon or "club" the United States into dealing with him. On the record made in the Court of Claims, which, unfortunately, we could not bring to this Court, this attempt to place the United States in the position of the "injured innocent" would be found to invert the real situation. Had we been able to get that record here, it would have shown this claimant to be a pioneer in this art, and that it was at his expense and by his labors and the introduction of his machines that the primitive, slow, inaccurate and costly hand-method of copying documents was displaced. We beg leave to quote from page 7 of our petition for certiorari in this case to the Supreme Court the following:

"The record in this case shows that when machines of the same general type (patented by claimant) were first introduced into use (which was by an installation by claimant in the General Land Office of the Interior Department in 1909) such a method of copying records was wholly new in the government bureaus, and the method in use was the primitive, slow, costly and frequently faulty one of hand-copying, by pen or typewriter. The operation of that first machine installed by claimant aroused great interest in government circles and it was the subject of reports to the Secretary of the Interior, and the Efficiency and Economy Commission, appointed by President Taft, and to a sub-committee of the Appropriations Committee of Congress, and committees from the Patent Office and other government bureaus investigated that first installation in the Land Office."

The evidence in support of the foregoing is quoted on pages 10 to 16 of that petition.

Respectfully submitted,

FRANK S. APPLEMAN,
Attorney and of Counsel
for Claimant-Appellant.

CHARLES J. WILLIAMSON,
Of Counsel.

Washington, D. C., April 21, 1920.

ADDENDA.

Perhaps, too, this Court will permit us to quote from Senate Document 293, which contains a letter of President Taft dated Feb. 5, 1912, and the Report of the Commission on Economy and Efficiency, dated December 4, 1911, which show *first*, how revolutionary was the change in Government methods of copying, wrought by the introduction of the photo copying machine, such as that of claimants' patent and defendant's photostat, and *second*, how novel and unique in the practical art at that date was such a machine, and, therefore, proves by implication, the inadequacy of the art, as shown by the patents relied on by defendant to measure up to the practical needs. In that Report, the Photostat is mentioned as the machine under consideration, but praise of the Photostat, is eulogy of claimant's machine because, as we have shown, the two are brothers, in all essentials of structure, functions and results. This Report is dated some four and a half years after the filing of the application for the Beidler patent in suit, which was March, 1907, and as far back as September 22, 1909, claimant was making broad claims to his invention, Finding III, T. R., 16.

We quote as follows from Senate Document 293:

"Its investigation has led the commission to the opinion that this device * * * if used to the extent to which adapted, an annual economy of not less than \$100,000, and possibly of two or three times that sum, can be secured."

.

"Exhibit B * * * represents a tabulated statement originally prepared on the typewriter, * * * the cost of reproduction by the typewriter process would be about \$2.50, whereas the cost by the process shown was but 8 cents.

"The operation of the machine does not require the services of a high class clerk; in fact * * * even a messenger could be employed on this work with results equal to those produced by a clerk of the highest class.

"The photostat is almost automatic in operation," etc.

Not merely has the "Government testified to its excellence by using" the invention, as said in the *De Bange Gas Check Case, supra*, but by this Report has expressly testified thereto. And in that case as in this, the device of the Government followed another patent, and differed in its construction from that shown in the patent in suit, and the same contention was made that it was not within the restricted scope of the claims for which the Government contended.

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Appellant contends that defendant infringed claims 18, 19, 33, 34, and 40 of the patent in suit. (Rec. p. 16, line 7.) Defendant contends, on the other hand, that the claims in suit are invalid because the structure on which they are predicated is inoperative; that they define no invention over the prior art; and that they are vague, indefinite, and meaningless. Defendant further contends that the Photostat machine used by it did not infringe said claims.

Both sides took testimony, and after consideration thereof the Court of Claims found that defendant did not infringe the claims of appellant's patent in suit and that the patent is invalid and therefore dismissed the petition.

REVIEW OF THE COMMON METHOD OF PHOTOGRAPHY.

As the patent in suit is for an apparatus for producing a photograph it may not be amiss to review, briefly, the common method of producing photographs, which method prevailed long before appellant filed his application.

Prior to the filing of the application on which the patent in suit issued the art of photography was practiced for copying anything desired, including writings. As is well known, a photographic copy is an image of the thing photographed, reproduced on a light-sensitive surface by the action of actinic light rays.

The usual method is to expose a sensitive film to light, in a camera for instance, and to thus produce

an invisible or latent image on said film. To make this image visible, the exposed sensitive film is removed from the camera and (further exposure to the action of actinic light rays being prevented) treated in a chemical solution known as "developer." This treatment or development is accomplished in a light-proof room or cabinet.

The developed image is then made permanent, that is to say proof against the action of actinic light rays, by treating the same with another chemical solution known as "fixing solution." Usually the film, carrying the image, is washed free of the excess developer before being submerged in the "fixing" bath, and after "fixing" it is washed free of the fixing solution and dried.

Appellant's machine purports to be for the exposing, developing, and fixing of a paper film, or, in other words, a machine for carrying out the old method of producing a photograph.

BRIEF OF ARGUMENT.

Defendant will show in the following argument that the patent in suit is invalid because the structure disclosed therein is inoperative; that the model offered in evidence by appellant to show the operativeness of the device of the patent is not built in accordance with the disclosure or within the scope of the patent; that the construction of the machine of the patent in suit is such that the film necessarily is moved continuously and progressively in one direc-

tion only and precludes such a short reciprocation of the film clamp as is now claimed by appellant and illustrated in the model offered in evidence; that the machine of the patent was never commercially used; that the patent is invalid in view of the prior art because the claims in suit do not define an invention patentable over the prior art; that whether or not the claims in suit are valid, defendant's use of the Photostat did not constitute an infringement of the claims, as there was no identity of means, operation, or result between the machine of the patent and defendant's machine; and that the claims are invalid because they are meaningless, being vague, indefinite, and ambiguous.

ARGUMENT.

PATENT IS INVALID BECAUSE THE MACHINE DISCLOSED THEREIN IS INOPERATIVE.

Machine of Patent in Suit.

The patent purports to cover an apparatus, such as illustrated in the patent drawing, for photographing and developing. In this illustration (see inserted enlarged reproduction of patent drawing, page opposite page 4), at the left end of Fig. 1 and beneath the camera F a roll W of sensitized paper is mounted within a light-proof container B. The paper from the roll is supposed to pass through the camera F with the sensitive side uppermost, during which passage successive portions of the paper are subjected to the action of actinic light rays which are reflected onto the sensitized

surface by the reflector H located within the camera F. Disposed between the camera F and the receptacle B for the sensitized roll of paper is a pair of feed rolls D between which the paper is supposed to pass. These feed rolls are for the purpose of feeding the leading edge of the paper between the cutting blades O which are located immediately to the right of the feed rolls, whence the paper passes to clamping devices N. These clamping devices are mounted on the extreme left ends of racks M, which racks are adapted to be moved forward and backward within a light-proof cabinet A. At the extreme right of Fig. 1, mounted on a shaft K, a pair of manually operated pinions L engage the racks M so that the latter may be moved either to the right or to the left, thus moving the clamps N and withdrawing the paper Y from the roll W.

Arranged beneath the racks M within the cabinet A are tanks I, J, and J', which are intended to contain developing, fixing, and washing fluids.

According to the mode of operation set forth in the patent specification, a portion of the sensitized paper Y from the roll W is exposed in the camera F and thereafter the racks M are moved to the right (the leading edge of the paper being engaged by the clamps) until the exposed portion is drawn beyond or to the right of the cutting blades O. The blades are then manually actuated to sever this exposed portion from the remainder of the paper film. The racks are then moved farther to the right to "carry

Fig.1.

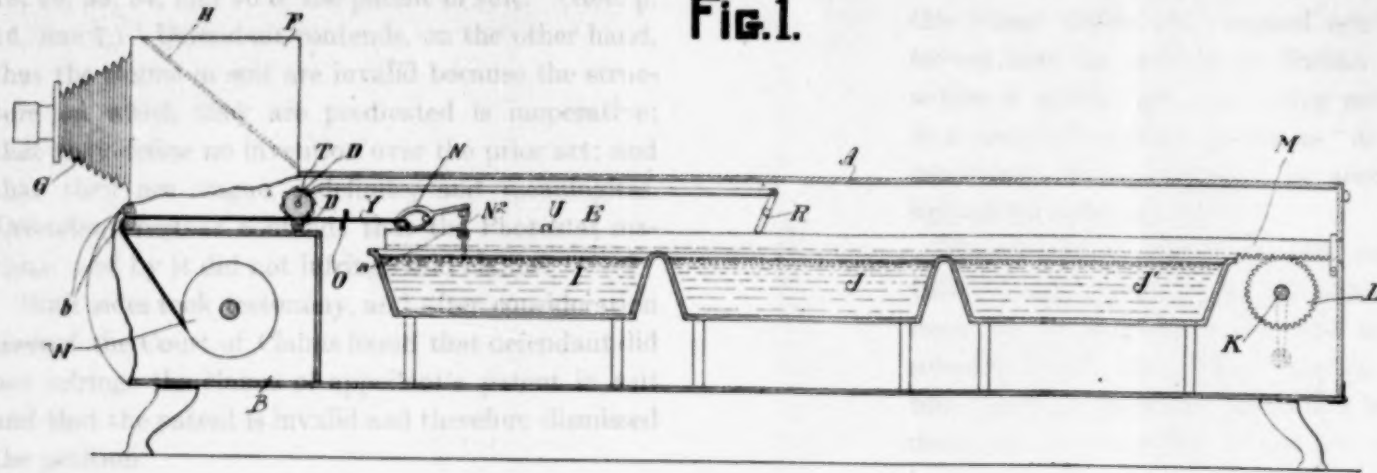
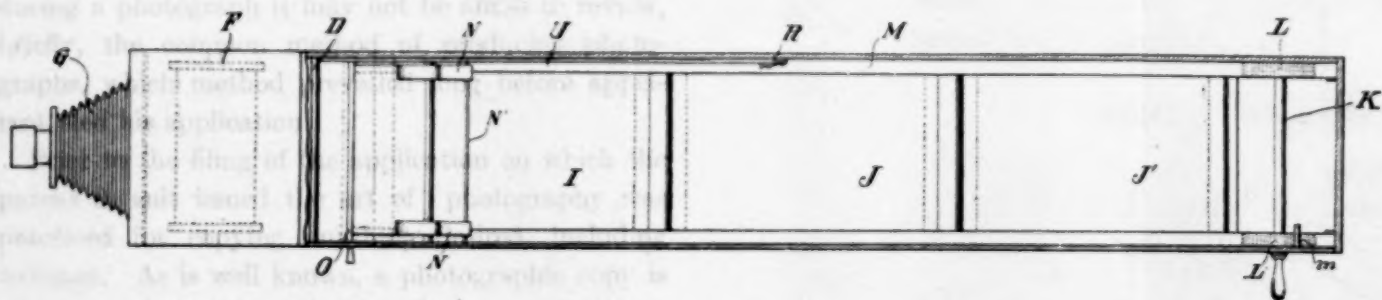


Fig.2.



the film through the tanks." During this movement to the right the racks will extend through openings in the right end of the cabinet A.

Mounted upon the upper face of one of the racks near its left end is the pin U, which when the racks have completed a portion of their movement to the right, carrying with them the severed portion of the film, engages and passes to the right of a lever R pivoted midway between the ends of cabinet A, thereby moving the lever pivotally. Extending from this lever R and pivoted to the upper end thereof is a pawl S which engages a ratchet on the upper roll D of the feed rolls hereinbefore referred to. The actuation of the lever R by the pin U results in the rotation of the feed rolls D so that sufficient paper is fed from the supply roll W to enable the same to be gripped by the clamps M when they return to their initial positions at the left end of the cabinet A adjacent to the feed rolls D and the cutting blades O. Located at the left end of the cabinet A (fig. 1) is some sort of a trip n and located at the right end of the cabinet (fig. 2) is a second trip m . The trip n is supposed to open the jaws of the clamping devices N with the assistance of the device N^2 (which device N^2 is associated with the trip n in some manner not described in the specification and not disclosed in the drawing) whereby the paper may be gripped by said clamps. The trip m is described as being adapted to open the clamps N at the end of their movement to the right so that the severed por-

tion of the paper will be released and deposited in the last or washing tank J'.

The cabinet A is light-proof and all of the operating mechanism with the exception of the handle on the end of the shaft K at the right end of the cabinet is located within the latter so that it is inaccessible and invisible to the operator.

The rack and clamps carried thereby are inoperative to "carry the film through the tanks" in such manner that it will be subjected to the developing and fixing fluids and the latent image on the film developed. The machine is therefore inoperative to accomplish any useful result. Examination of the patent drawing discloses this fact. It is not surprising that no machines were ever built in accordance with the disclosure of the patent. (Rec. p. 27, Finding VIII.)

• Inoperativeness of machine of patent in suit.

The machine is vitally inoperative.—Assume the exposed portion of the paper to be gripped by the clamps and severed from the remainder of the strip by the blades O. When the racks are now moved to the right, that is to say, away from the camera, the free end of the severed portion of the paper might drop into the first or developing tank with the exposed sensitized side uppermost. A very material portion of the paper, however, would be held above and out of the developing fluid inasmuch as the clamps are disposed at a considerable height above the top of the

tanks. Therefore, at best, only a portion of the paper would be within the liquid. Furthermore, the exposed sensitized surface of the paper would be uppermost and the paper would float on the surface of the developer with the sensitized surface out of contact with it. No means for submerging the paper is provided nor is any contemplated. Hence, if the developer is to act on the film at all it is necessary for the film to gravitate into the same and this gravitation could only take place after the paper had become saturated with the developer. Furthermore the film would not sink evenly and therefore the first parts to sink would be overdeveloped, rendering the ultimate print unsatisfactory. This necessary saturation would consume more time than is permitted for the development of the film. *The film must be subjected to the action of the developer for a comparatively short time and all portions of the film must be submerged simultaneously to obtain a uniform development.* (Rec. p. 28, Finding IX.) The free end of the severed film would simply drop into the first tank and the film would be drawn from this tank successively over the others. The ultimate result would be, *at most*, the uneven development and fixing of an incomplete portion of the exposure. This result, of course, would be entirely unsatisfactory, and so far as any commercial value is concerned the machine is useless. The Court of Claims found as a fact (Rec. p. 28, Finding IX):

The machines of said claims 17, 18, 33, 34, and 40 of the patent in suit are not operative

or useful machines when operated by the mode of operation contemplated and disclosed by the patent, for the reason that, *so operated, they will not submerge all portions of the film in the developing liquid with sufficient rapidity and uniformity to secure proper development of the film.* [Italics ours.]

As stated in the immediately preceding paragraph, appellant's apparatus is not useful in the view of the patent law. The term "useful" when applied to an apparatus means that the machine will accomplish in a practical manner the purpose for which it is intended. It is to be given a practical and not a speculative meaning. It means that the apparatus will operate to accomplish the result as set forth in the specification. Even if the apparatus can be made to accomplish the desired result, it is not useful if it will accomplish the result only to such a restricted extent as to make its use in ordinary industry prohibitive. This has been the interpretation put upon the term "useful" from the earliest decisions up to the present time. (See *Bliss v. Brooklyn*, Fed. case No. 1546; *Chandler v. Ladd*, Fed. case No. 2593; *Troy Laundry Mach. Co., Ltd. v. Columbia Mfg. Co.*, 217 Fed. 787.)

There are other inoperative features of the machine of the patent in suit. Perhaps a mechanic skilled in the art could correct them without the exercise of invention. They show, however, that appellant had no conception of an operative machine when his patent application was filed. In order

that the leading edge of the paper may be gripped by the clamping means N, it is necessary that the paper be fed, by the feed rolls D, between the cutting blades O and the clamping means N when the latter is in the position illustrated in Figure 1 of the patent drawings. If this feeding is to be accomplished, it necessarily must be automatic, as the whole mechanism, with the exception of the operating handle, is inclosed within a light-proof receptacle and therefore inaccessible to the operator. The tendency of the paper when it is drawn from the supply roll W is to follow the curvature of the roll W, if not on the same radius, on a slightly greater one, and this tendency will cause the leading edge of the paper, after it leaves the feed rolls D, to move downwardly and not pass between the cutting blades O. If, by any chance, the paper does pass between the cutting blades, there is still the tendency for it to move downwardly out of the range of the clamping means N. If the paper film is to be engaged by the clamping means N it is necessary that it pass from the camera in a rectilinear path, and this, because of the tendency of the leading edge of the paper to turn downwardly, is a physical impossibility. The paper therefore will never reach the clamps.

**MODEL OFFERED IN EVIDENCE BY APPELLANT
IS NOT BUILT ACCORDING TO THE DISCLOSURE
OR WITHIN THE SCOPE OF THE PATENT.**

Appellant attempted to demonstrate the operative-ness of the device of the patent by a model operated in court. The Court of Claims found as a fact

(Finding VIII, p. 27-28 Rec.) that this model which was offered in evidence by appellant was not constructed in accordance with the patent in suit and operated on a different principle from the patented apparatus. This finding is conclusive. (*U. S. v. New York Indians*, 173 U. S. 464; *The U. S. v. Soci  t   et al.*, 224 U. S. 309-329. Appellant was denied *certiorari* to bring the model and evidence into this court. Sup. Ct. Rep. Vol. 40, p. 9.)

The model (Rec. p. 28) offered in evidence by appellant is not within the scope of the patent because the structure of the model is different from that set forth in the patent, and because the operation of the model is different from that of the patented device.

The Court of Claims found (Rec. p. 28, Finding VIII):

* * * By the method disclosed in the patent, the film with the exposed side uppermost, held at one end by the clamps attached to the rack M and moving in a plane above the pans containing the developing and fixing fluids, is intended, by the outward movement of the rack, to be drawn successively through the developing and fixing fluids, the rack moving in one direction only throughout its entire course, the end of the film next the knife and away from the clamps falling, when severed by the knife, on the surface of the developer in the first pan and possibly partly submerging by gravity. By the method pursued in the operation of the exhibit machine, after the film is severed and the severed end falls on or into the devel-

oper, the rack, by means of the crank, is oscillated back and forth in a range of a few inches until by its repeated reverse action, operating against the resistance of the submerged or free end of the film, the film is finally rolled over, with its exposed side down, in the developer, and submerged. And *in order to permit this changed method of operation without repeated operations of the feeding pawl S, and resultant excessive feeding of film into the developing chamber, the locations of the operating pin U and the developer tray I are materially changed from the disclosures of the patent, the pin being moved to the forward end of the rack M, near the clip N, and the developer tray being moved farther forward and partially under the knife O. Also, an inwardly projecting lip is substituted on the forward end of the developer tray instead of the outwardly projecting lip shown by the patent, this being for the purpose of facilitating the submerging of the film, and of preventing the liquor being splashed over the end of the tray by the movement of the film therein in this new method of its repeated reciprocation or oscillation in the tray and liquid.* [Italics ours.]

It must be remembered that all of the operating mechanism and the tanks are inclosed in a light-proof cabinet so that it would be impossible for the operator to determine the position of the cut-off portion of the paper during the so-called "reciprocation." In other words, the operator could not determine whether or not the paper was resting on

the edge of one of the trays, or what length reciprocation to impart to the clamps; or whether, after reciprocating for a time, the developing, fixing, or washing bath had covered the entire film.

Clearly, the specification gives no such definition to the term "reciprocate" as this. In the patent it is said that—

the said rack M [M insert ours] being alternately reciprocated through the rotation of the shaft K, in opposite directions. (Rec., pp. 5-6.)

Nothing at all is said about any reciprocation of the film, but it is stated distinctly that the so-called reciprocating means is—

to convey the sensitized film through a series of receptacles containing suitable developing and fixing fluids, or through suitable baths according to the requirements. [Italics ours.]

It is evident from the specification of the patent that when the clamps are moved in a direction away from the camera they are supposed to carry with them the severed portion of the film, and when they move toward the camera the film has been released and they are empty and ready to engage another and later exposed portion of the film.

It is well settled that a claim is to be construed in the light of the explanation contained in the specification. As the Supreme Court said in *Howe Machine Co. v. National Needle Co.* (134 U. S. 388, 394):

Doubtless a claim is to be construed in connection with the explanation contained

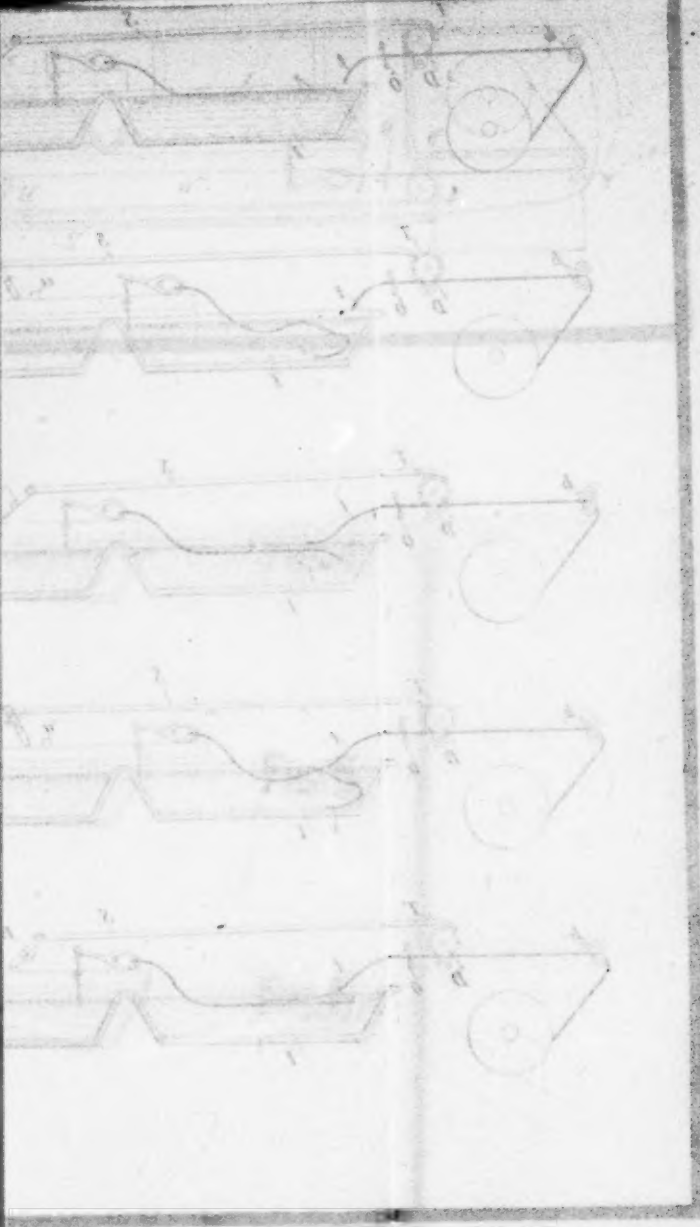
in the specification and it may be so drawn as in effect to make the specification an essential part of it; but since the inventor must particularly specify and point out the part, improvement, or combination which he claims as his own invention or discovery, the specification and drawings are usually looked at only for the purpose of better understanding the meaning of the claim, and certainly not for the purpose of changing it and making it different from what it is. As remarked by Mr. Justice Bradley, in *White v. Dunbar*, (119 U. S. 47, 52:) "The claim is a statutory requirement prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."

Cases of like import are:

Smith v. Goodyear Dental Vulcanite Co., 93 U. S. 486, 493; *Mossberg v. Nutter*, 135 Fed. Rep. 95.

Furthermore, as stated in *Hall-Borchert v. Ellenan, &c.* (C. C. A.), 213 Fed. Rep. 341:

* * * but it is *in the specification* (with such light as the drawings may throw upon it) that we are to find what the alleged invention is. When its language is plain and positive, its disclosure specifically set forth in unmistakable terms, *it is not to be modified by later theories of experts so as to enlarge the claims beyond their legitimate scope.* [Italics ours.]



DRAWING SHOWING THAT THE FITTING PARTS MUST BE MADE TO
 FIGURE 10 (10)

in the specification and it may be so drawn as in effect to make the specification an essential part of it; but since the inventor must particularly specify and point out the part, improvement, or combination which he claims as his own invention or discovery, the specification and drawings are usually looked at only for the purpose of better understanding the meaning of the claim, and certainly not for the purpose of changing it and making it different from what it is. As remarked by Mr. Justice Bradley, in *White v. Dunbar*, (119 U. S. 47, 52:) "The claim is a statutory requirement prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."

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Also:

De Laski & Thropp C. W. Tire Co. v. United States Tire Co., 235 Fed. Rep. 290, 292 (C. C. A.).

Outlook Envelope Co. v. General Paper Goods Mfg. Co. (C. C. A.), 239 Fed. Rep. 877, 879.

Appellant used considerable ingenuity in the construction of the model, but the facts stand out baldly that the *structure and mode of operation thereof are different from those set forth in the patent.*

It is clear, then, what the term "reciprocating" means in the claims, viz, a movement in one direction to carry the film over a series of tanks in succession, at the end of which movement the film is released, and a movement in the opposite direction over the whole series of tanks to engage the succeeding exposed film portion to repeat the first movement.

THE CONSTRUCTION OF THE MACHINE SHOWN IN THE BEIDLER PATENT IN SUIT IS SUCH THAT THE FILM NECESSARILY IS MOVED CONTINUOUSLY AND PROGRESSIVELY IN ONE DIRECTION ONLY, AND PRECLUDES SUCH A SHORT RECIPROCATATION OF THE FILM CLAMP AS IS NOW CLAIMED BY APPELLANT

An examination of the drawings of the patent in suit will show conclusively that the reciprocating film-feeding means move continuously in one direction and cannot be given the short movements necessary to submerge the film as now contended by appellant even if those short movements would accomplish any useful result.

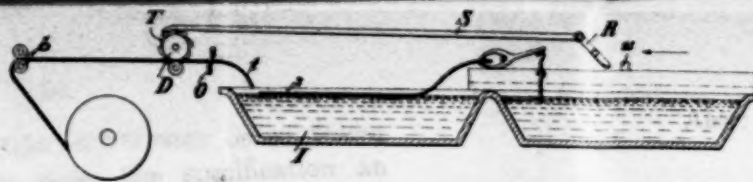


FIG. 2.

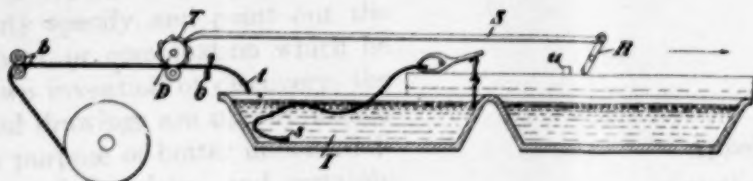


FIG. 3.

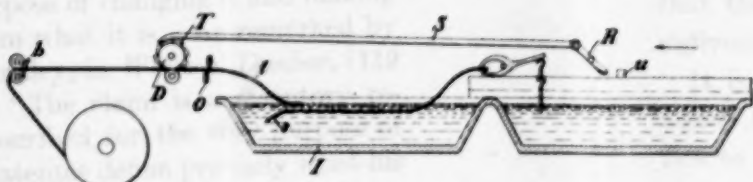


FIG. 4.

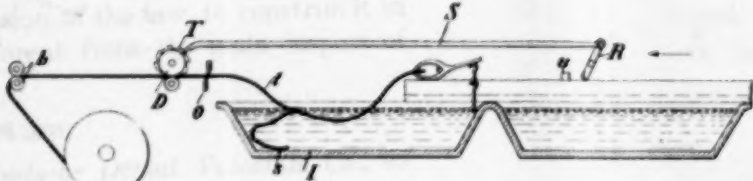


FIG. 5.



FIG. 6.

170057-20. (p. 16).

DRAWING SHOWING THAT THE FILM CLAMPS MUST BE MOVED CONTINUOUSLY IN ONE DIRECTION ONLY.

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In the annexed drawing (opposite page 16) is shown a series of sectional views of the machine of the patent demonstrating defendant's contention beyond peradventure.

Figure 1 is a reproduction of a portion of Figure 1 of the Beidler patent in suit, showing the paper or film gripped by the clamping device at the commencement of the operation of drawing the film or paper over the developing tank after the exposure has been made in the camera. In order that the portion of the film between the roll *b* (at the left end of Fig. 1) and the rolls *D*, which has been exposed, may be drawn forward the proper distance to allow the end *s* of the sheet which is severed by the knives or shears *O* to fall into the first developing pan *I*, it must be moved to the position shown in Figure 2, that is, until the pin *U* has *passed beyond and actuated* the lever *R* and operated the ratchet wheel *T* on the roll *D* to feed the end *t* of the film sheet from the severing knives *O* toward the jaws of the clamp, as shown in Figure 1.

Now, in order to submerge this end *s* in the new manner now described by claimant, it is necessary to move the rack to the left again, the parts then occupying the position shown in Figure 3 where the pin *U*, striking the lever *R*, turns it to the position shown, but without rotating the ratchet wheel *T* and the feed roll *D*. When the rack is moved to the right again to the position shown in Figure 4, the pin *U* on the rack again engages and turns the lever *R*, ratchet wheel *T* and roll *D*, thereby again moving the end *t*

of the film outward beyond the knife O the same distance as before, the film end *t* then occupying the position shown in Figure 4. It will be noted that under any theory of operation, a single oscillation of the lever R must rotate the roll D and move the film an amount equal to the distance between the knives O and the end of the gripping jaws of the clamp, as shown in Figure 1—for otherwise the clamps could never reach it—and that two oscillations of the lever R will therefore feed the film extending from the camera down into the pan, as shown in Figure 4, so that under no circumstances could its end *t* be grasped by the clamp when moved to the left, as described in the patent.

Inasmuch as in the operation of the apparatus the film and clamp are concealed from the operator's view, it is clear that more than two reciprocations of the frame or film holder will be necessary to submerge or even partially submerge the print grasped by the clamp, and as the location of the pin U and the lever R, as shown in the patent, is at the exact point to which the film-feeding device must be actuated by the frame or rack at each movement to the right if the film is to be kept in the pan, the end *t* of the film will have been fed so far down into the pan that it will be impossible for the clamp to reach it again. Therefore, after one attempt to submerge the film by reciprocating the rack and clamp it will be impossible to operate the device further. One more reciprocation of the

frame would feed the free end of the film still further into the pan, as shown in figures 5 and 6.

On the other hand, with the parts constructed as shown in the patent, if the clamp or rack is moved *progressively and continuously* to the right, without attempting to return it until the print is deposited in the last pan, the operation of dragging the severed print over the pans and the feeding of the end *t* of the film by the roll D in order that the end *s* can be engaged by the clamp would be possible, although this operation would be inadequate to cause the development, washing, and fixing of the print which is dragged with its sensitive face upward across the liquids in the pans, and the Court of Claims has so found as a fact. (Rec. p. 28, Finding IX.)

It appears, then, that the machine of the patent is wholly inoperative unless altered in vital particulars; and that when so altered it must be operated in a manner not contemplated by the specification if any practical result is to be obtained.

MACHINE OF THE PATENT WAS NEVER COMMERCIALY USED.

No machines within or embodying the mechanism of claims 17, 18, 33, 34, or 40 of the patent in suit have been commercially manufactured or used; nor have any machines ever been constructed and practically operated within the scope of the claims and by the disclosed method of operation of said patent, and the Court of Claims has so found as a fact. (Rec. p. 27, Finding VIII.) It appears that the only ma-

chines which appellant did place on the market were constructed according to other patents owned by appellant and *not included in this suit*. The patent in suit is a mere "paper patent" and it has been used as a "club" in an attempt to force the United States Government to buy the machines of appellant's *other* patents rather than the 'Photostat' which the Government now uses.

See *Troy Laundry Machinery Co. v. Columbia Mfg. Co.*, 217 F. R. 787-788.

PATENT IN SUIT IS INVALID IN VIEW OF THE PRIOR ART.

The prior art will be considered chronologically to show the step-by-step development of the photographic machines.

Ratzell, No. 112,380, of 1871.

This patent discloses a combination camera and developing box. In operating the sensitized plate is exposed and the developer fluid and water flowed over the plate from the tap *t*, *the plate being held by the manually actuated pliers L* (Spec. p. 2, par. 1), which extend through the oilcloth light-excluding hood L. The patentee states (Spec. p. 2, col. 2, lines 7, 8) in describing the operation of the device:

Take the pliers and take the plate off the dipper, and hold it under the taps.

Thus this very early patent discloses a camera and developing apparatus contained within a light-proof cabinet, and also discloses means for manip-

ulating the sensitized plate during the development. This is the same broad aggregation as that disclosed in the patent in suit.

Parker, No. 117,106, of 1871.

The Parker patent discloses a projecting apparatus *a*, a developing tank E, and a washing tank N. The plate is held in the developing tank (after being delivered to it by the member G) by the carrier *e* which is adapted to be raised manually and drawn to the left and then lowered to place the plate in the tank N. Clearly, this shows the association of a camera, a series of tanks for containing the developing and fixing fluids, and means for carrying the plate through the tanks. The carrier *e* is moved in one direction to carry a plate from one tank to the other, and is moved in the opposite direction to grip another plate with which to repeat the operation.

Waterbury, No. 133,394, of 1872.

This patent marks another step in advance and discloses a roll of sensitized paper which is held in the uppermost container and from which the paper passes downwardly between feed rolls and through the cameras AA. From the cameras the exposed paper film passes between rolls HH and may be cut off into proper lengths. The patentee states (Spec. p. 1, col. 2, lines 20 and 21):

Below the cameras may also be a suitable paper cutter.

Furthermore:

The finishing process will be like other photographic processes now well understood. (Spec. p. 2, col. 1, lines 31-33.)

This patent, therefore, shows the use of sensitized paper onto which the image is projected, the paper being subsequently cut, and the cut-off portion developed in the usual manner, that is to say, passed successively through tanks of developing, fixing, and washing fluids, such as described in the art existing prior to this patent.

Neil, No. 157,459, of 1874.

Neil discloses a "reciprocating" member for transferring a sheet of paper from the cylinder to the delivery board of a printing press, the action being similar to the alleged action of the film-carrying means of the patent in suit. A pair of cooperating jaws *e* and *e'* are actuated by a trip *q* to close when the gripping device is at the end of its movement toward the cylinder, and are opened by a trip *R* when the device is at the end of its opposite movement. The Neil patent is in an art very analogous to the photographic art, the only difference being that in the printing art the impression is made on the paper by means of type and in the photographic art by projection. In any event the transfer device *N* operates to transfer the sheet on which the impression has been made to a support or holder—similar to the transfer of a film to the developer holder.

Godfrey, No. 475,522, of 1892.

Here also is a machine for handling a strip of paper and in this instance the gripping means 49 engages the advance edge of the strip and pulls it from a roll until the proper length is obtained, at which time the strip is severed by the knives 76, 77. It is noteworthy that the strip of paper is coated (at 115, patent drawing), is gripped by the jaws 40-49 at the end of their reciprocating movement in one direction, is drawn off the roll until a proper length is attained, is cut off, is applied to the box (38, Fig. 12, patent drawing), and that at the end of the movement of the jaws 48, 49 in the opposite direction they are automatically opened to release the strip.

Perry, No. 420,355, of 1890.

This patentee, recognizing the difficulty arising from the curling of the film during development, contributed a film holder to the art. In this device the film is placed beneath the clips on the frame and is held flat during the development and fixing. It is possible with this device to place the film in the developing and fixing baths to manipulate it in such a manner that the fluids may be flowed evenly over the sensitized surface, and this without necessitating the placing of the operator's fingers or hands in the solutions.

Steffens, No. 429,705, of 1890.

This patentee made a still further advance in the art. In this patent the flexible films are exposed in the camera and carried automatically and succes-

sively through the developing, etc., baths. Specifically, after the image is projected on to the film by the camera, the film passes between the endless belts R and R' and is conveyed thereby through the several baths and finally delivered to the chute N (Fig. 3), from which it passes from the machine—the same general aggregation as illustrated in the patent in suit.

Wight, No. 616,999, of 1899.

This patent is valuable to the extent that it shows a reel e^3 (Fig. 2), to which is attached one end of a film N', which film enters the light-proof cabinet a^2 through a suitable slit. The tray K, containing the proper developing or fixing fluid, is raised from the position shown in Figure 2 "until the solution in the tray comes up to the film on the reel." (Spec. p. 1, lines 43, 44.) The film is cut to the proper length by the cutter a^6 and the reel rotated to carry the film through the solution in the tray. In short, we have in this patent a tray for the developing fluid, a roll of film, means for cutting off a portion from said roll, and means for carrying the cut-off portion through the bath in a tray—broadly, the same result which appellant's "reciprocating" film-conveying means is supposed to accomplish.

British, No. 1,015, of 1899.

A photographic apparatus is disclosed in this patent in which the film roll L is mounted in a chamber K. The film is fed to the lower chamber B, where a por-

tion is held by the holder D, and which portion is cut off by the knife S. The holder is then manipulated to lower the film into any of the several fluid containers E.

Fleischer, No. 683,031, of 1901.

Fleischer follows in 1901 with a very similar device where the film is cut off by the knife K² and the cut-off portion lowered into the solution C.

Pollak & Virag, No. 688,115, of 1901.

In 1901 Pollak & Virag obtained a patent disclosing the association of a camera 29 which projects the image onto a portion of a film obtained from a roll; means 31 for cutting the exposed portion from the roll; a series of tanks 4, 8, 22 for containing developing, fixing, and washing fluids, and means in the form of an endless conveyor for carrying the cut-off portion of the film to the several containers and through the several solutions therein. All of this is inclosed in a light-proof cabinet. *The device of the patent in suit differs from this device only in the specific means for conveying the film through the baths.* In the Pollak et al. device the film is conveyed by the endless conveyor, while in the appellant's device the film is carried by clips on racks which move in one direction and return in the opposite direction instead of completing the circuit. It is noteworthy that in appellant's device when the racks move in one direction they carry the exposed film with them, and when they move in the opposite di-

rection they are free of the film, and that in the Pollak et al. device when the film is engaged by a portion of the endless conveyor the movement of *that portion* is away from the camera, but when that portion returns toward the camera it is likewise free of the film, the film having been released therefrom at the end of its outward movement. At most, the only novelty in appellant's device over the Pollak device is in the particular form of the film-conveying means; but even this is not patentable novelty as the means in the Pollak et al. device is the equivalent thereof, in each case the film being acted upon while the conveying means moves in one direction, and being released at the end of that movement. It therefore makes no difference how the carrier returns as it has, then, no function so far as the treatment of the film is concerned.

Dudley, No. 740,828, of 1903.

This patent is interesting in that it shows a light-proof container 5 for developing fluid and shows further "reciprocating" means 13 for clamping the leading edge of the film and drawing it through the fluid, said means being manually operated.

Beldler, No. 810,388, of 1906.

Appellant in 1906 obtained a patent which shows the same broad aggregation as that set forth in the claims in suit. This patent discloses a photographic apparatus; means 13 for holding a supply roll of film, which means is light proof and constructed to

protect said film from actinic light rays, and has means (holder 8) for subjecting a portion of the film to the action of such rays; receptacles 16a within the casing 1 for containing developing fluids; means (the endless conveyor 34, 35) to carry the film through the tanks, and means for severing the exposed portion of the film (knife 49c). *This patent discloses, therefore, all that is disclosed by the patent in suit, except the specific form of the film-conveying means.*

Beldler (Reissue), No. 12,834, of 1908.

This is a reissue of patent No. 810,388, and in so far as it is of interest in this suit, discloses the same as the original.

Prentiss, No. 830,741, of 1906.

Prentiss discloses a roll of film 5 on which is printed the images at 7, 8. The film then travels through developing, fixing, and washing baths B, C, and D, respectively, being carried there through by endless conveyor F. This patent is of particular interest in that it shows a series of open, horizontal trays and means for carrying the film through in said trays, and in fact discloses all but the particular form of the film-conveying means. It is therefore evident that *if there is any novelty in appellant's patent in suit over this Prentiss patent it is in the specific form of the film-conveying means*, but this means, as has been shown, is inoperative to accomplish any useful result.

SUMMARY OF DISCLOSURES IN PRIOR ART.

The prior art shows that before the filing of the application on which the patent in suit issued photographic machines of the same general character as that disclosed in the patent in suit were old; that is to say, photographic machines for continuous-process photography, having *combined and cooperating* mechanical means (a) for holding a supply of film (or print paper), (b) for supplying a portion of such film in proper position in the camera for the photographic exposure and exposing the same, (c) for conveying the exposed portion of film to a light-proof chamber having receptacles for developing, fixing, and washing solutions or liquids, (d) for detaching the exposed film, and (e) for conveying it successively through the developing, fixing, and washing solutions or liquids for the development and finishing of the negative or print.

In the structures disclosed by said patents all of the above-enumerated means are substantially the same as in the structure or machine of appellant's patent in suit with the exception of the means for conveying the exposed section of film through the developing and other solutions or liquids. In some of said patents this operation is performed by means of continuous or endless belt or apron carriers, operating upon rollers, by which the film is held and carried successively down into and up out of the trays or receptacles containing the developing, fixing, and washing solutions or liquids; and in others of

the patents it was performed by manually operated reciprocating means. There was also in the printing art at the time of appellant's application for his said patent an automatic *reciprocating* device for engaging and transferring the printed sheet from the cylinder of the press to the delivery board, which device is very similar in character and action to the said film-conveying means of appellant's patent in suit and is from a closely analogous art. (Rec. p. 26, Finding VI.)

It, therefore, is evident that if there is any novelty in the device of the patent in suit it is in the *specific form* of the reciprocating means and *this form is not specifically claimed in the claims in suit and is different from the transfer means used by defendant as is hereinafter pointed out.*

**THE CLAIMS IN SUIT DO NOT DEFINE A PATENT-
ABLE INVENTION IN VIEW OF THE STATE OF
THE ART.**

Appellant has elected to sue upon claims 17, 18, 33, 34, and 40. (Rec. p. 16.) The only difference between the elements recited in these claims and the apparatus shown in the Pollak & Virag patent No. 688,115 and the prior Beidler patent No. 810,388 is that the film-carrying or feeding means is stated to be a *reciprocating* film moving means, and, for the reasons hereinafter stated, *this term does not, in view of the prior art, define a patentable difference.* In any event the disclosure of the prior art is such that a very strict construction of the claims is necessary

even if they are held to embody patentable subject matter and they must be limited to cover only a structure having precisely the same mode of operation as that shown and described in the patent.

The elements of a representative claim and those in the prior patents are as follows (see drawings opposite page 29):

Beidler patent in suit.
Claim 17.

(1) Means for holding the supply of film and protecting it from light.

(2) Means for subjecting film to light.

(3) Liquid holder.

(4) Film - feeding means between the holder and supply of film.

(5) Reciprocating film moving means receiving the film and carrying and subjecting it to the action of liquid.

Pollak & Virag.

(1) Camera 29.

(2) Camera shutter.

(3) Tank or pan 4.

(4) Rollers 32 and 33.

(5) Belts 13, rollers 17 and 19.

Beidler No. 810,388.

(1) Camera box 4.

(2) Shutter of camera or slide 7.

(3) Developing tray 16 (also 16b, 16c, Fig. 7).

(4) Rollers 49 and 50.

(5) Belts or aprons 34 and 35.

The combination of a film-exposing camera, a film-severing means, and a film-carrying and developing means is thus shown to be old in the prior art and clearly there is no new combination recited by the mere statement that one of the elements, i. e., the film-moving clamp, *reciprocates*, when this performs no function in the broad combination, excepting to cause the clamp's return to its initial grasping position. The exposure of the film has been accomplished before the conveying and developing device functions

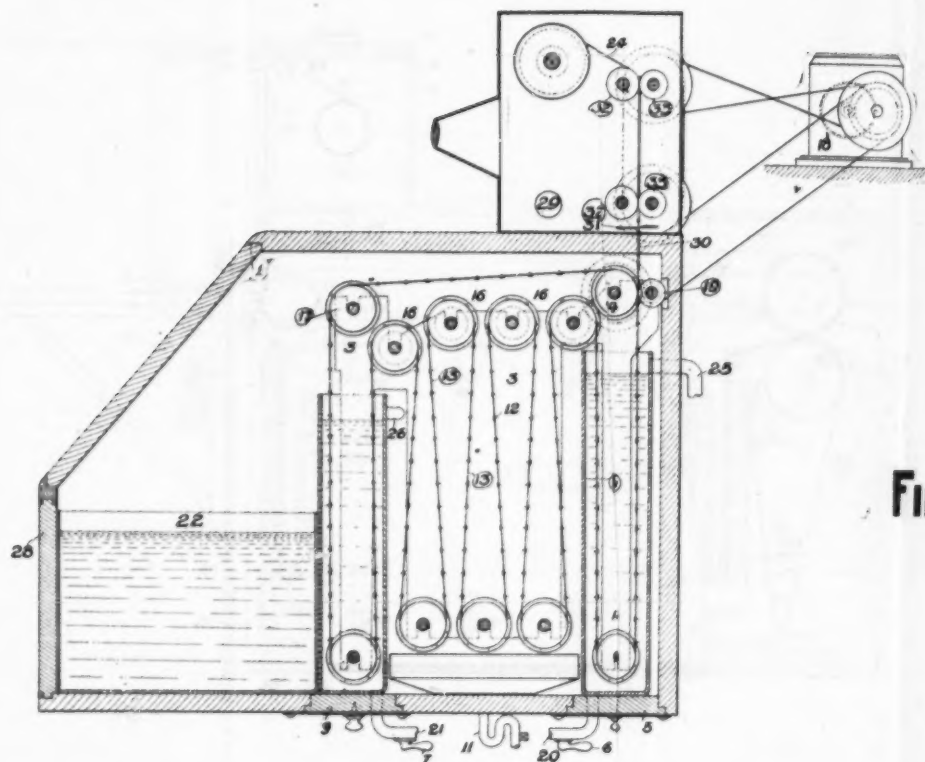
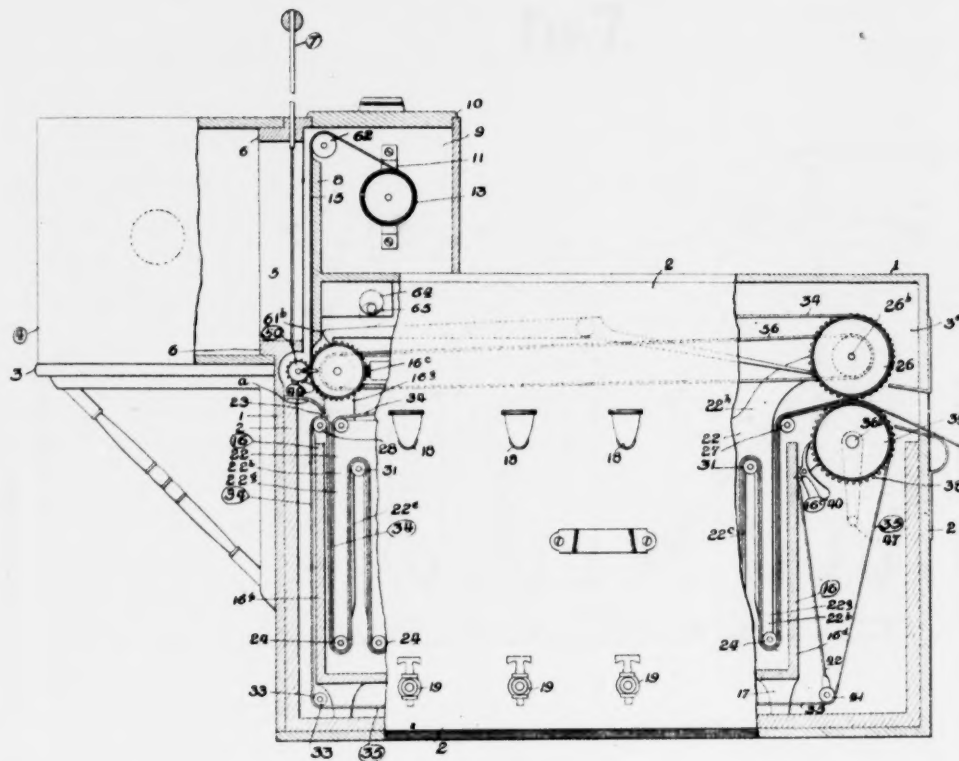


FIG.1.



roll D, and the projection of the end of the film in the camera beyond the cutter O, inasmuch as the clamp jaws *must* be closed and opened by the pins *n* and *m* and the feed rollers D must be operated by the ratchet wheel T, the pawl S, the lever R and the pin U on the reciprocating rack for each exposure.

Thus in order to distinguish the patentee's invention from the prior art in a patentable sense, the word reciprocate or reciprocating, as applied to the film-carrying devices, must necessarily refer to some structure which has the *essential characteristics* of that disclosed in the patent and, as will be shown hereinafter, that characteristic feature is not contained in the apparatus used by defendant.

**WHETHER OR NOT THE CLAIMS IN SUIT ARE
VALID, THERE IS NO INFRINGEMENT, AS THERE
IS NO IDENTITY OF MEANS, OPERATION, OR
RESULT.**

Defendant's machine.

Structure.

Defendant since 1911—two years prior to the issue of appellant's patent—has been using a type of machine known as "Photostat," which machines, it is claimed, infringe the patent in suit. This type of machine, as illustrated (on page opposite to page 32, brief), comprises a camera behind which is a film-supply receptacle B containing a roll of sensitized paper. This paper is adapted to extend downwardly behind the camera in the space F where the exposure is made. At the lower end of this space

F hand-operated feed rolls D—D are located, and between which rolls the paper passes. Located behind the rolls D—D, a knife O, actuated by the handle O', cuts the paper into the proper lengths after the exposures have been made. A series of trays I, J and J' is carried by a suitable support and the foremost tray I is located beneath the feed rolls to receive the sensitized and exposed portion of the film, which film is fed to the tray I with its sensitized surface *down*. This tray I is adapted to contain the developing fluid and the other trays to contain the fixing and washing fluids. The tray I is covered by the light-proof hood A so as to exclude light rays during the development of the film.

When these machines were first manufactured—that is, from 1910 to February, 1911—the films were manipulated in the developing bath as well as in the fixing and washing baths directly or entirely by the hands or fingers of the operator (Rec. p. 21, lines 9, etc.), the film after development being drawn successively into the fixing and washing trays. However, since February, 1911, means has been provided for handling the prints in the developing bath, *which means is, however, in the nature of a tool separate from the machine itself*, a device such as illustrated (on pages marked 25 and 26 of the record and on page opposite page 32 of this brief) being used, which device was manufactured under authority from the owner of U. S. letters-patent to Greene, No. 1,001,019, dated August 22, 1911. This device (see drawing opposite page 32), a print-han-

dling slide M (Rec. p. 20, Finding IV), has a plate-like bottom resting on the bottom of the developing tray, with a number of perforations or holes *h* therein, ribs, or ridges *b*, on its upper surface for forming limited points of contact with the film or print when it rests thereon and the clamping fingers *N* attached to the ends of the finger bars *N*² for clamping and holding the print after it is fed between these fingers and the bottom of the slide. The finger bars *N* are pivoted to vertical posts *n*² rising from the bottom of the slide, and are connected together by the handle bar *N*¹; and the fingers *N* are normally held in a raised position with relation to the bottom of the slide by the tension springs *n*³ against the under sides of the finger bars *N*² to allow the film or print to be fed between the finger bars and the bottom of the slide. The handle bar *U* is connected rigidly to the rear portion of the slide.

Operation.

The mode of operation of the machine is as follows (Rec. p. 20, Finding IV):

The film roll *W* being in place in the film-supply receptacle *B*, and a portion of the film (*F*) being in position for the photographic exposure, the developing hood *A* being closed down to exclude the light from the developing tray *I*, and with the developing tray *I*, the fixing tray *J*, and the washing tray *J'* properly supplied with their respective fluids, and the slide *M* in the developing tray being well forward in the tray for receiving the exposed film to be developed, the exposure of the film or sensitized paper

is then made in the usual way. Then by hand-crank rotation of the film-feeding rollers D—D the exposed portion of the film or print is fed downward through the slot just below the rollers and into the developing tray and liquid, guided by the finger guides V of the tray, and passing above the bottom of the slide M and between it and the raised fingers N of the spring-supported finger bars N². The exposed section of the film or print is then cut off just below the film-feeding rollers by the knife O, operated by the hand crank O'. Then by the operator grasping and pressing together the movable handlebar N' and the fixed handlebar U of the slide M, the terminal fingers N of the pivoted finger bars N² are, by the resulting upward movement of the handlebar N', and against the tension of the springs n³, pressed down until the print is grasped between them and the bottom of the slide. The slide is then drawn, with the print, back in the developing tray and liquid, and any small portion of the severed film next to the knife which may not already have passed into the developer is thereby drawn therein. All these movements are to be performed quickly in order that all portions of the paper shall be subjected to the action of the developing fluid as nearly as possible the same length of time, this being essential to good photographic work. When the paper has been in the developing fluid the proper length of time, ordinarily about 30 seconds, the slide M is drawn back, the rear end upward onto the back and partially out of the developing tray and

chamber, bringing with it the developed print which is *then drawn by hand out of the slide and by hand successively put through the fixing bath and the washing bath* in the open fixing tray J and washing tray J', thus completing the photographic process. The slide M being returned to and placed in the developer tray, the machine is ready for a repetition of the process, a new unexposed section of the film having been brought into position for exposure by the action of the film-feeding rollers in feeding the formerly exposed section of film into the developer tray and liquid.

COMPARISON OF MACHINE OF PATENT IN SUIT AND DEFENDANT'S MACHINE.

Machine of Claimant's Patent.

1. The patented machine is automatic and mechanical throughout, particularly in the transportation of the prints.

2. The feed rolls D only advance the paper into the path of the clips and no more. They are entirely and solely mechanically and automatically operated through the lever R, pawl S, and ratchet T, and actuated by the movement of the transporting device, or rack M. These feed rolls do not move the print into the developer in operating the device—according to the specification; in fact, have nothing whatever to do with that.

3. The cutter O is the only thing that causes the print to get into the developer pan since the film must be cut before it can fall into the pan.

Defendant's Machine.

1. Defendant's machine is hand-operated throughout and particularly in the handling of the prints.

2. The feed rolls D feed the paper directly into the liquid in the developer pan I. They are hand-operated (through a crank-handle). There is no advance feed of the paper in defendant's machine and no reason or object for any such feed.

3. The cutter O has nothing whatever to do with the print getting into the developer pan since it is already there before cutter O is operated.

Machine of Claimant's Patent—Con.

4. Clips N are automatically opened and closed by the movement of the crack M to which they are secured. The trips for operating such clips are at the extreme ends of the path of the rack.

5. Rack M and clips N carry or pull the print from the supply roll W out of the camera or exposure chamber into the enclosed casing A and over the several pans therein in succession releasing them over the last pan—all performed mechanically and automatically.

6. All parts of the machine are enclosed in a casing and entirely inaccessible, particularly during operation, to the operator's hand.

Defendant's Machine—Continued.

4. No corresponding feature in defendant's machine. Even if the depressible handle of the developer slide itself be regarded as the counterpart of the clips then there is no proper comparison, since such developer slide "clip" is not automatically operated; there are no trips to operate it; it is operated entirely by the fingers of the operator.

5. Nothing to correspond in defendant's machine. Feed rolls D pull the print off the supply roll W, pull it out of the camera and into the first developer pan I only. From there on everything is done by the direct application of the operator's hand, and particularly the transfer of the print out of the developer pan and into the succeeding pans. To be minutely exact, the developer slide intervenes between the hands of the operator and the print itself *in the developer pan only*, but this is not for the purpose of conveying or transporting the print, but is merely to obviate staining the operator's fingers and contaminating the solution.

6. All parts of the machine throughout the entire process of manipulating the print are readily accessible to the operator's hands, who can and does, from the time the print enters the first developer pan I, handle and manipulate the print throughout the entire process with his hands.

Machine of Claimant's Patent—Con.

7. The characteristic and distinguishing feature is the automatic and mechanical print conveyor made up of racks M and clips N as differentiating from carriers of the prior art that consisted of endless tapes or aprons that mechanically transported the print from the camera to and through several baths in succession.

Defendant's Machine—Continued.

7. This feature is entirely absent from defendant's machine, as there is no mechanism for moving the print from the developer to the succeeding baths.

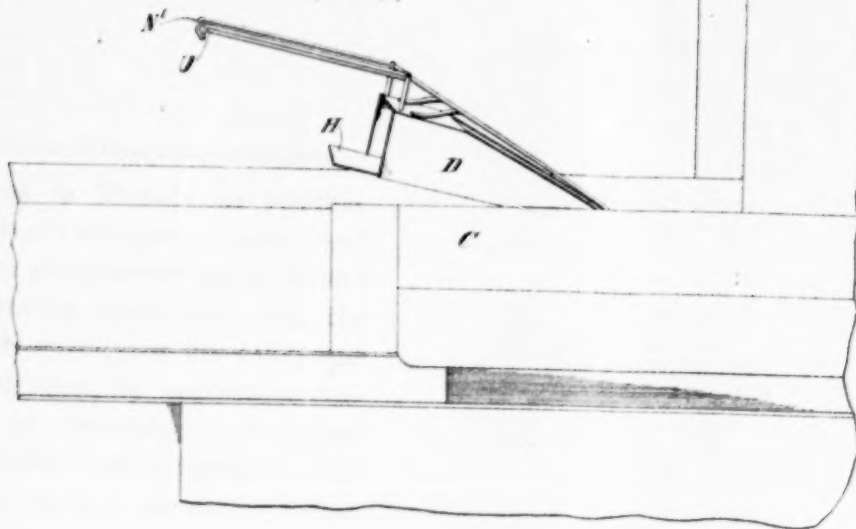
Claims in suit do not cover defendant's machine.

Considering the claims as liberally as possible, they do not cover defendant's machine. Leaving out of consideration that the print-carrier (racks M and clips NN and their operating mechanism) was the the only thing on which novelty or invention was (or could be) predicated when the application was filed; also leaving out of consideration the point that substituting a particular form of carrier such as this for the old aprons or tapes of the earlier Pollak *et al.* and Beidler patents, does not give appellant herein the right to claim *the whole machine* as the invention of the patent in suit, the claims in suit may be compared as far as feasible with defendant's machine. The conclusion of noninfringement follows:

Considering claims 17 and 18 (which are alike, except that the latter uses the expression "a reciprocating film clamp" in place of "reciprocating film-moving means" in the former) it may be conceded *arguendo* that these claims may be applicable to defendant's machine down to and including "a liquid holder."

15.5

FIG. 2.



170057-20. (p. 41).

DRAWING SHOWING HOW PRINT-HANDLING DEVICE IS LIFTED FROM THE DEVELOPING PAN.

as before pointed out, is the so-called "novel" means in the patent, and is the rack M with its clips N and their operating mechanism (Pat. p. 1, l. 64-107). Its function is—

to convey the sensitized film through a series of receptacles containing suitable developing and fixing fluids, or through suitable baths, according to requirements. (Pat. p. 1, l. 13-18.)

Also:

to draw the film through the several compartments. (Pat. p. 1, l. 64-65.)

* * * * *

as rack is moved outwardly the film is carried through the several tanks as indicated. (L. 81-83.)

It is a *transporter or conveyor*.

In defendant's machine the separate and disconnected developing slide is charged by plaintiff as being this carrier. But it is clear that it is no such thing. *It does not transport or convey the films.* It is a mere hand tool and no part of the machine. It is for the purpose of lifting the print out of the developer—not to carry it into and through it.

In the patent specification the clamps N are described as moving in one direction, that is to the right, to carry the cut-off portion of the film through the developing fixing and washing fluids. In other words, their function is to submerge the film in the several solutions (although they are inoperative to do this as has hereinbefore been pointed out). In the

model which appellant introduced into evidence, a series of short reciprocations are given to the clamps N for the purpose of submerging the film in the developing fluid. Whether the term "reciprocating" in the claims be read broadly enough to comprehend this latter mode of operation or be confined to the former mode which is disclosed in the specification of the patent, is entirely immaterial so far as the question of infringement is concerned.

The fact is the clips N are mounted in the patented machine so that they move in opposite directions in a given path and for the purpose of drawing the film through the developing, fixing, and washing fluids. The print-handling device used in the Photostat by defendant is not a "reciprocating" element in any sense of the word. *It is simply a tool independent of the machine which is insertable into the developing tank. It has no fixed or definite path of movement. Its movements and directions of movements are controlled by the operator and it is not for the purpose of drawing the film through the developing fluid, the fixing fluid, and the washing fluid or any of them, but for the purpose of removing the film from the developing solution.* The film is fed into the developing fluid by the feed rolls of the Photostat, and after being so fed is gripped by the print-handling device (which is best shown in the drawings of the Greene patent opposite p. 20, Rec.). After the film is so gripped, the print-handling slide is drawn rearwardly within the developing tank and raised over the rear edge thereof into such a position as is shown in the accompanying drawing (opposite p. 41), which drawing is a reproduction of a page

of the Photostat trade catalogue which was introduced into evidence in the Court of Claims. In this drawing the slide is indicated by the letter D and is clearly shown in its raised position with the hood A, which is adapted to enclose the developing tank, swung into its upper position to permit the actuation of the slide.

After the slide is moved into this position the print H is removed therefrom by the fingers of the operator and the print is then passed by the fingers of the operator through the fixing solution, the slide remaining at all times in the developing tank. It will therefore be seen that the slide does not reciprocate and that its function is not to draw the film through the several solutions or even through the developing solution, and it is not a developing slide in any sense of the word since the development of the print is not dependent upon the slide but upon the fact that the print is fed into the developing solution by the feed rolls. The slide is nothing more than a hand tool which is in the nature of pincers and its function is to remove the developed print from the developing solution so that it may be subsequently placed in the other solution by the operator. It merely takes the place of the operator's fingers and obviates the necessity for his placing his fingers in the developing solution with the consequent results unpleasant to him and detrimental to the solution.

It will therefore be seen that there is no identity between the structure, mode of operation, or the result of the slide used in the Photostat, and "the recipro-

cating means" of the patented device, and therefore there can be no infringement of any claims of the Beilder patent in suit.

**THERE MUST BE (1) IDENTITY OF MEANS,
(2) IDENTITY OF OPERATION, (3) IDENTITY OF
RESULT FOR INFRINGEMENT TO EXIST.**

The law that there must be substantial identity of means, operation, and result between the machine of the patent and the alleged infringing machine for the latter to constitute an infringement is well settled by a long line of decisions, among which are:

Kokomo Fence Machine Co. v. Kitselman,
189 U. S. 8.

*Pittsburgh Meter Co. v. Pittsburgh Supply
Co. (C. C. A.)*, 109 Fed. Rep. 644, 651.

Masseth v. Larkin (C. C. A.), 119 Fed.
Rep. 171, 174.

*United States Envelope Co. v. Sherman En-
velope Co.*, 122 Fed. Rep. 464, 466.

There is no infringement if there is merely identity of result and not identity of operation. *Cimiotti Un-
hairing Co. v. American Fur Ref. Co.*, 198 U. S. 399,
414. Nor is there infringement even where the
terms of the claims are infringed unless the principle
of operation is substantially the same. (*Standard
Computing Scale Co. v. Computing Scale Co. (C. C.
A.)*, 126 Fed. Rep. 639.)

From the preceding comparison of the machine of
the patent in suit and the defendant's machine, it
will be seen clearly that there is non-identity of
means, non-identity of operation, and non-identity of
result.

CLAIMS IN SUIT ARE MEANINGLESS, BEING VAGUE, INDEFINITE, AND AMBIGUOUS, AND ARE THEREFORE INVALID.

It is well understood that infringement can only be of some claim or claims of a patent; but the claims of the patent in suit are meaningless. They are so vague, confused, and ambiguous as to defeat the very purpose for which claims are prescribed. Instead of marking out and defining the invention, the claims obscure and confuse it. The invention must "emerge from the specifications," and the claims are to particularize *from the specification what is new as therein disclosed*. As the statute requires (sec. 4888, R. S.), the inventor—

shall *particularly* point out and *distinctly claim* the part, improvement, or combination which he claims as his invention or discovery.

Each of the 41 claims should be a distinct invention from the other (*Leeds & Catlin v. Victor T. Mach. Co.*, 213 U. S. 301, 319); and though only 5 of them are herein declared to be infringed, yet the meaning of each of those claims has to be differentiated from the others, in order to avoid a construction that would make two or more claims of the patent identical. As said in *Scaife & Sons v. Falls City W. Mills* (C. C. A.) 209 Fed. Rep. 210—

* * * proper construction and effect can be given to each claim only by differentiating it from the other claims. *Each claim should be capable of such differentiation, else it has no right to exist.* (P. 214). [Italics ours.]

See also—

Tate v. B. & O. R. R. (229 Fed. Rep. 141, 144).

McCarty v. L. V. R. R. (160 U. S. 110, 116).

It is no wonder that in cases such as this courts condemn and discourage such loose claim-writing by invalidating them for ambiguity or vagueness. As said in *Victor T. Mach. v. Edison* (229 Fed. Rep. 999 (C. C. A.)):

* * * the practice is so obviously mischievous that *the courts should discourage it as much as possible, as well as the practice which permits 48 claims upon a simple and perfectly obvious machine like this. Such claims violate the very purpose of any claims at all, which is to define the forbidden field. In such a waste of abstract verbiage it is quite impossible to find any guide. It takes the scholastic ingenuity of a St. Thomas with the patience of a yogi to decipher their meaning* * * *.
[Italics ours.]

Also *Carlton v. Bokee* (17 Wall. 463).

But it is clear what, if anything, the alleged invention consisted in. It is no more than a mechanical carrier or conveyor for the prints, of the rack-and-pinion type, that when moved forward will automatically grip the prints that have been automatically advanced to be in its path, and when moved backward will drag the print from the exposure chamber over the whole series of baths necessary to make a finished picture and

automatically drop the print in the last bath—everything but the operating handle being inaccessible to the operators and inclosed in the light-tight casing A.

The holding of the Circuit Court of Appeals (Grosscup, J.) in *State Bank of Chicago v. Hillman's*, 180 Fed. Rep. 732, 736, is here directly in point:

The question of law presented, then, is this: Can the patentee rightfully include in his claims *something that does not emerge from the description?*

We think not. The description is required to set forth the invention in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it appertains or with which it is most nearly connected to make and use the same; and the claim is to enable the public to know the bounds and scope of the invention "thus disclosed"; but "*any claim which is broader than the described invention is void, even where that invention is valuable and could have supported a valuable claim.*" (Walker on Patents (4th ed.), sec. 177, citing *Edison v. American Mutoscope Co.*, 114 Fed. 934; 52 C. C. A. 546.) [Italics ours.]

Having ascertained the nature of the invention disclosed in the patent in suit, the claims in suit (claims 17, 18, 33, 34 and 40) may be considered.

The invention is in a "photographing and developing apparatus" (see title of patent, also *l.* 9-17, p. 1). But claims 17, 18, 33 and 34 here in suit are not for such apparatus, but on the contrary are for a "*photographing apparatus*" only—as they state;

while claim 40, also in suit, is for a "photographing and developing apparatus." How shall this difference be construed? Or shall it be ignored?

Again, claims 17, 18, and 40 specify—

the combination of means for holding a supply of film, constructed to protect said film from actinic rays of light *and having* means for subjecting *a portion of film at a time* to the action of such rays, etc. [Italics ours.]

But claims 33 and 34 include no means for subjecting *a portion of film at a time* to the rays—otherwise they are respectively identical with claims 17 and 18 (except for another difference in claim 34 to be presently noted). Shall this difference be construed to mean that claims 33 and 34 subject *all* the film to the rays? But the specification neither shows nor suggests any construction that could expose *all* the supply of film at a time to the rays. Moreover, *there are no means for exposing the film at all* in these two claims—only means to *protect* it from exposure. To read the means for exposing only a portion of the film into claim 33 would be to invalidate it by making it identical with claims 17 and 18; and to read it as it stands would invalidate it because it defines a useless structure, viz, *one that does not expose the film at all* and hence receives no image or photographic impression; and, further, *one that is without the knife to allow the film to fall in the developer.*

Again, no knife, cutter, or other means for cutting off the exposed prints is specified in claims 17 and 18

(which expose only a "*portion* of film at a time"), nor in claims 33 and 34 (which do not expose any of the film). But a cutter is specified in claim 40 which ends "and means for severing the film." Are claims 17 and 18 to be rewritten by the court to include the cutter; and if so, are claims 33 and 34 also to be similarly rewritten even though nothing is said therein about exposing only *portions* of the film at a time?

Again, in claims 17 and 18 it is specified—

The combination of means for holding a supply of film, constructed to protect said film from actinic rays of light *and having means for subjecting a portion of film at a time to the action of such rays, etc.* [Italics ours.]

What is meant by this language? What is the subject of the italicized portion "and having," etc.? According to these claims it is *the means that hold the supply of film protected from actinic light* that is to have these means to expose a portion thereof to such light. But what *is* the means to hold the supply of film protected from light? The specification does not explain. Assuming it to be "compartment B adapted to contain sensitized paper, preferably to roll form" (Pat. *l.*, 43-45, p. 1), this, according to the claim, *protects* the film supply from light. But if so, this chamber B has no means for subjecting a portion of the film to the light. *Another and different feature* permits that, viz, exposure chamber F (Pat. *l.*, 51-57, p. 1). These claims 17 and 18 are therefore not referable to the specification and do not "emerge therefrom," as is necessary. They specify something

foreign to the invention disclosed. This material discrepancy can not be corrected without rewriting these claims.

Again, claims 17, 18, 33, but not 34, specify:

And a reciprocating film-moving means (or film clamp, claim 18) situated to * * * subject the film to the action of the liquid in the liquid holder.

Passing over the point that "the liquid holder" does not agree with the specification, since that prescribes *at least* three liquid holders—or more, but never less (Pat. l. 60 p. 1)—it is to be noted that these claims require that the "*reciprocating film-moving means*" (i. e., the racks M and clips N) subject the film to the action of the liquids. *But as a matter of fact they are incapable of doing anything of the kind.* It has been already pointed out that the film can not get into the liquid without the intervention of the knife O. Indeed, this is specifically claimed in claims 23 and 24, where precisely the same feature is defined as—

means for *stretching the film over*, the means for containing the solution, and *means for severing the film to permit it to fall into the solution.* (Claim 23.) [Italics ours.]

Of course, then, if the film is not cut or severed it can only be "stretched over" the pans *and never will get into the solution at all.*

Claim 34 is also for an incomplete and inoperative aggregation. Aside from having only "means to protect the film from exposure" and no "means to

permit exposure"; and aside also from having no cutter by the operation of which alone the film can reach the liquid in the receptacles, this claim differs from claim 33 in omitting any mention of the "reciprocating film clamp" (reciprocating film-moving means in claim 33) as acting to "*subject the film to the action of a liquid in the liquid holder*" as does claim 33. Hence if this claim is not to be rewritten for the benefit of the appellant as against defendant, then this claim is for a wholly inoperative aggregation—not to mention the omission of the knife which would also have to be written into it.

Claim 40 further specifies "*reciprocating developing means operative to develop said exposed film.*" But these so-called reciprocating "developing" means are the rack M with the clips N, and these are *not* "operative to develop" the film, because, as seen, the film can never get into the knife O (also specified in this claim) to free the end of the film and "*permit it to fall into the solution*" (claims 21, 23, and 24). This misnamed "developing means" is merely a "suspending means," holding the film merely "in position to subject the film carried thereby to the action of the liquid" (claims 8, 13, 14, 15, 16, etc.). Again, it is merely a *film-stretching* means, i. e., "means for *stretching the film over* the means for containing the solution" (claims 23, 24).

Again, "means for *delivering* the film from the exposing means *to the reciprocating developing means*" in this claim 40 is wholly misdescriptive of the pat-

ented construction. The parts so referred to are the feed rolls D and the pawl S and ratchet. These parts are only operated on the *rearward* movement of the rack M and clips N. That is, the clips N have moved entirely away from the film "delivered" by the feed rolls when such "*delivery*" takes place (pin V has to pass beyond lever R to effect this so-called delivery). How, then, can a thing be said to be *delivered* to another *when that other is not there to receive it*? Furthermore, *the clips already have a section of film in their grasp* when this co-called "*delivery*" thereto is made. As the specification clearly states, the feed rolls D merely move the film "a short distance * * * in order that it may be *in the path of travel* of the clips" (Pat. 2, 1.1), but the *clips are not there* when this is effected; they are traveling in the opposite direction with a section of film already in their jaws.

SUMMARY.

Defendant submits:

(1) Defendant's "Photostat" machine does not correspond to, nor is it the equivalent of, the device disclosed and claimed in plaintiff's patent. It differs therefrom in structure, mode of operation, and in result attained.

(2) Said "Photostat" machine does not infringe any of claims 17, 18, 33, 34, or 40 of the patent in suit, which claims are sued upon.

(3) The patent in suit No. 1057397, dated March 25, 1913, is void because of insufficiency and vague-

ness of disclosure; as lacking patentable invention; as being an aggregation of old and non-coöperating elements; for want of novelty and utility and vagueness and ambiguity of claims.

The decision of the Court of Claims holding the claims of the patent in suit invalid and not infringed should be affirmed.

Respectfully submitted.

FRANK DAVIS, Jr.,
Assistant Attorney General.

EDWARD G. CURTIS,
DANIEL L. MORRIS,
*Special Assistants to the
Attorney General.*



Opinion of the Court.

BEIDLER v. UNITED STATES.

APPEAL FROM THE COURT OF CLAIMS.

No. 260. Argued April 27, 28, 1920.—Decided June 7, 1920.

Patent No. 1,057,397, granted to George C. Beidler, March 25, 1913, for an improvement in photographing and developing apparatus, does not contain a description of the claimed discovery adequate to render it useful, and is therefore invalid for failure to disclose a practical invention.

53 Ct. Clms. 636, affirmed.

THE case is stated in the opinion.

Mr. Charles J. Williamson, with whom *Mr. Frank S. Appleman* was on the briefs, for appellant.

Mr. Daniel L. Morris, Special Assistant to the Attorney General, with whom *Mr. Assistant Attorney General Davis* and *Mr. Edward G. Curtis*, Special Assistant to the Attorney General, were on the brief, for the United States.

MR. JUSTICE CLARKE delivered the opinion of the court.

This is a suit to recover damages for the infringement of five of the forty-one claims of Letters Patent No. 1,057,397, applied for March 23, 1907, and granted on March 25, 1913.

The specification describes the claimed invention as an Improvement in Photographing and Developing Apparatus, and as designed primarily for reproducing writings, drawings, pictures or the like,—“novel means being also provided to convey the sensitized film through a series of receptacles containing suitable developing and fixing fluids or through suitable baths according to the requirements.”

The patent is for a machine made up of a combination of elements all of which were old, to produce a result which was old but by a method of co-ordination and operation which it is claimed is new and useful. The invention is declared in the specification to consist in "the details of construction and in the arrangement and combination of the parts," as "set forth and claimed" by the inventor.

Figure 1 of the drawings, forming a part of the specification, will aid in explaining the construction and function of the invention as claimed and in determining the character and extent of the disclosures of the patent. [See p. 449.]

The described mode of operation is substantially as follows:

W is a roll of sensitized paper or film placed immediately below the exposure chamber F of a camera, with its sensitized surface uppermost to receive the desired image, reflected from the mirror H. This film is fed into the chamber between the rollers b, and thence along the floor thereof to the rollers D where it emerges from the camera and is seized by "clips" or clamps N. These clamps are supported and carried by a rack M, and may be moved to and fro (reciprocated) by turning the pinions L on the shaft K, by means of a crank.

I, J and J' are shallow pans or "tanks" in which suitable "developing," "fixing," and "washing" solutions or fluids are placed and the whole of the construction to the right of the camera, as we face the print, is enclosed in a light-proof case E, referred to in the patent sometimes as a "compartment" and sometimes as a "chamber." The rack M, and the clamps which hold and support the film, move above the tanks and necessarily above the level of the liquid within them. By turning the pinion L, the rack M is moved outwardly away from the camera, and the clamps draw the film after them until the required length is attained, when it is severed from the roll by a manually operated cutter, O. When the film is thus cut to the

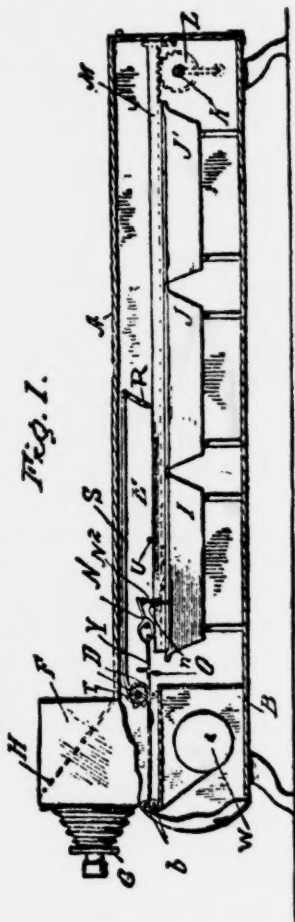
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Opinion of the Court.

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Fig. 1.



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Clifford L. Lessor

desired length, obviously only the free end will fall to the surface of the solution in the tank I, and by continuing the outward movement of the rack M, the specification declares, "the film is carried through the several tanks." The "clips" or clamps are set and released automatically and at the limit of the outward movement the film is released and falls into the tank J.' By reversing the turning of the pinions L the rack and clamps are returned inwardly to the camera, so that the operation, just detailed, may be repeated.

The Court of Claims carries into its findings of fact fourteen patents as illustrative of the prior art, and with this exhibit before us we fully agree with that court that the claim of invention of appellant must be restricted to the disclosed construction and operation of the mechanism for carrying the exposed section of film "through the developing and other solutions or liquids" after it leaves the camera.

In the description of the operation of the machine as we have just given it, there is no provision other than gravity for causing the free end of the film, when it is cut from the roll, to sink into the developing fluid, and the other end of it is held between the clamps, above the surface of the fluid, as it is drawn along from one tank to another. The Court of Claims found that under such conditions of operation all of the film would not be submerged with sufficient rapidity and uniformity to secure a proper and useful development of the image, and this conclusion is not seriously disputed. But the appellant contends that the required submergence may be obtained by oscillating the rack and clamps (and thereby the film) back and forth within the range of a few inches when the film is over the first tank, I, with the result that the free end of the film, first sinking into the fluid, is turned under and over and the exposed side of it wholly submerged and thereby developed.

In reply to this it is contended by the Government that the disclosures of the patent do not contain any suggestion of a short, reciprocating movement of the rack, such as is thus relied upon, and that the drawings provide for a construction of the machine which would be inoperative if such movement were resorted to.

Upon this subject the finding of the Court of Claims is, that the machine can be rendered operative only "by resorting to the new oscillating mode of operation evolved by the claimant . . . for submerging and developing the film," and that such mode of operation is not disclosed in the patent. On the contrary, it is especially found that:

"By the method contemplated and disclosed in the patent, the film with the exposed side up, held at one end by the clamps attached to the rack M and moving in a plane above the pans containing the developing and fixing fluids, is intended, by the outward movement of the rack, to be drawn successively through the developing and fixing fluids, the rack moving in one direction only through its entire course, the end of the film next the knife and away from the clamps falling, when severed by the knife, on the surface of the developer in the first pan and submerging by gravity."

Treating this finding by the court as an interpretation of the patent and therefore as a conclusion of law and subject to review, we are brought to the question whether the short, reciprocating movement of the rack, confessedly necessary to successful operation of the machine, is disclosed in the patent, as it must be to render it valid. Rev. Stats., § 4888.

The only description of the mode of operation of appellant's machine, and the statute requires that this must be the best mode known to the patentee (Rev. Stats., § 4888), is found in the specification and is as follows:

"In order to draw the films through the several compartments, I provide a mechanism consisting of a shaft K,

having toothed wheels L, which mesh with a rack M, the said rack being suitably guided in the compartment E, and being alternately reciprocated through the rotation of the shaft K, in opposite directions. When the shaft is turned to the right, the said rack will be projected from the compartment until the inner end thereof is nearly above the shaft K. When the shaft is rotated in the opposite direction, the said rack will, of course, be retracted and thrust into the compartment. It is the purpose of this invention that the said rack shall carry clips N, which are designed to clamp on the edges of the film Y and as the said rack is moved outwardly, the film is carried through the several tanks as indicated. The clips are automatically released and set through the contact with trips within the casing in the path of travel of said clips."

We agree with the Court of Claims that this language describes a movement of the rack M, carrying the clamps N, in one direction only—outwardly and progressively away from the camera—until the movement is completed and the film is released, and that the reciprocating movement referred to in the patent is the return of the mechanism for clamping and carrying the film to its initial position for the purpose of repeating the operation.

There is nothing in the disclosure or in the claims to suggest the arresting of the outward movement of the clamps as soon as the film is severed from the roll and the initiating thereupon of a short oscillating movement of the mechanism to and fro, until the film shall have been immersed in the developing liquid sufficiently to bring out the image photographed. It is very clear that no such operation can be derived from the disclosure in the patent, and we agree with the further finding of the Court of Claims that in order to permit "this new oscillating mode of operation evolved by the claimant" material changes would be required in the construction of the machine, from that disclosed in the description and drawings.

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The statutes, which are the source of all patent rights, provide that a valid patent may be granted for a new and useful machine, or for a new and useful improvement thereof (Rev. Stats., § 4886), but they require that every applicant for a patent shall file a written description of the manner and process of making and using his invention "in such full, clear, concise, and exact" terms as to enable any person skilled in the art to which it relates to make and construct it, and in case of a machine the description must disclose the best mode in which the inventor has contemplated the application of his discovery. Rev. Stats., § 4888.

Ever since *Grant v. Raymond*, 6 Pet. 218, 247, it has been consistently held that a correct and adequate description or disclosure of a claimed discovery (which, in the case of a machine, involves particularly the operation of it) is essential to the validity of a patent, for the reason that such a disclosure is necessary in order to give the public the benefit of the invention after the patent shall expire. The source of the power to grant patents, and the consideration for granting them, is the advantage which the public will derive from them, especially after the expiration of the patent monopoly, when the discoveries embodied in them shall become a part of the public stock of knowledge.

The application of these requirements of the law to our conclusion that the only form of construction of the machine and the only method of operation of it which are disclosed in the patent would not produce a sufficiently uniform and rapid development of the film to render it useful, must result in the approval of the judgment of the Court of Claims, that the patent is invalid and void, for the reason that it fails to disclose a practical and useful invention.

This result renders it unnecessary to consider the further conclusion of the court below that the use by the

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United States of photo-copying machines of a type known as "Photostat," manufactured and sold under warrant of Letters Patent issued to J. S. Green, No. 1,001,019, would not have constituted an infringement of appellant's patent had it proved to be valid. However, for its bearing on future possible controversy, we add that the construction and relation of the two appliances, designed to produce the same result or product, have been fully considered and that we agree with the conclusion of the Court of Claims.

Affirmed.